

2002 catalog



T-shirts

RCA Tube Diagram T-shirt



Ash colored t-shirt. The back has a cut-out drawing of an RCA tube with a diagram of different tube components. Vacuum Tube Valley logo on front. Size XL only.

G-835XL \$18.95



front

Nipper T-shirts



Available in Red & White, sizes Large or XL. Black, size large only. Printed on the front of the shirt.

Closeout

White, size Large	G-730L	\$14.95
White, size XL	G-730XL	\$14.95
Red, size Large	G-731L	\$16.95
Red, size XL	G-731XL	\$16.95
Black, size Large	G-732L	\$16.95

Nipper Sweatshirts



Available White only. **Closeout**

Large	G-735L	\$19.95
XL	G-735XL	\$19.95

6L6 T-shirt



High Quality 100% preshrunk cotton. Gray with black letters. Printed on the front of the shirt.

XL only G-801XL \$16.95

Vacuum Tube Valley T-shirt



Sea Green t-shirt with black and white logo printed on left front. Available in size XL and XXL only.

XL	G-818XL	\$14.95
XXL	G-818XXL	16.95

Zenith T-shirt



White with black logo. Front printed.

Large	G-816L	\$18.95
XL	G-816XL	\$18.95

Fun stuff

Crystal Rocket Radio



The original Rocket Radio was first offered in the late 1950's and now it's back! A fun way to learn about radios and how they work. Suggested for ages 8 & up. Includes: Rocket with tuning rod nose cone, crystal earphone, and antenna lead with clip.

K-439 \$10.95

Coffee Mugs



Nipper 12 oz

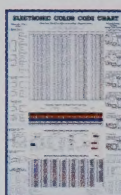
G-435 \$8.95

Antique Electronic Supply "Tube Dude" Logo. 11 oz

G-821 \$4.95

Posters

Electronic Color Code Chart Poster



25" x 38"

B-P104

\$9.95

The Evolution of Radio Poster



20" x 26"

Closeout

B-P101

\$12.95

Vintage Reproduction Zenith Production Poster 1937



25" x 38"

Closeout

B-P105

\$16.95

Antique Electronic Supply Workbench Poster



24" x 36"

B-P102

\$4.95

Nipper Memorabilia



Banks

9" Tall

12" Tall

G-746B

G-747B

\$29.95

\$39.95

Figurines

6 1/2" Tall

9" Tall

12" Tall

G-722F

G-746F

G-747F

\$14.95

\$34.95

\$49.95

Nipper Dog Magnet



2" x 3"

G-M80

\$3.95

Nipper Dog Music Box



Plays "Where has my Little Dog Gone?"

Approximately 5 1/2" x 6"

G-748

\$34.95

Nipper Dog Salt & Pepper Shakers



G-147

\$14.95



We Have Gift Certificates!

Are you looking for the perfect gift for your hobbyist friend, but aren't quite sure about the certain item they need? How about an Antique Electronic Supply gift certificate? They are available in any amount over \$20.00 and are good for one year after the issue date.

I-200

\$

Our Pricing and Quality

We believe we provide competitive and fair pricing while maintaining the quality and integrity of the product. We feel that we can save you money by providing you with a reliable and timely source for your electronic component needs. We charge a handling fee of \$2.50 on each order. We have a \$10.00 minimum order requirement that can be waived with the understanding that the cost of shipping and handling may exceed the price of the goods purchased. **All prices and availability are subject to change. Our 2002 catalog is issued in October 2001 and prices are effective immediately.**

Our Guarantee

All items in our catalog are guaranteed to meet your satisfaction or they may be returned within 10 days for exchange or credit. Please note, opened software cannot be returned. Defective software is returnable for exchange only. **Please check and/or test your purchases upon receipt**, even if the items are a back-up set for future use, and notify us of any problems within the warranty period.

We reserve the right to charge a restocking fee where no evidence of product failure exists if merchandise is returned after the 10 day period. No returns will be accepted without contacting Customer Service for authorization. (See below)

All **non-tube** items are warranted for 30 days.

All **new tubes** (except horizontal amplifier tubes, also known as "linear or sweep tubes") are guaranteed to meet manufacturers specifications for 90 days, except for breakage or when damaged by operation outside manufacturers' specified ratings.

All **used tubes** are guaranteed to meet minimum industry standards for used tubes and are guaranteed for 30 days. The same exceptions and conditions as noted above for new tubes apply to used tubes.

Linear/Sweep tubes are guaranteed for 10 days, except for breakage or when damaged by operation outside the tube manufacturers' specified ratings. The following is a *sample list* of what we consider linear/sweep tubes (new and used tubes are included):

6DQ5, 6DQ6A-B/6GW6, 6HB5, 6HF5, 6JB6-A, 6JE6C/6LQ6, 6JG6A, 6JR6, 6JS6C, 6JT6A, 6JU6, 6KD6, 6KG6A/EL509, 6KV6A, 6LF6/6MH6, 6LR6, 6LX6, 6MJ6, 12JB6A, 12JF5, 12JQ6, 12JT6A, 17JQ6-A, 17JT6A, 17KV6A, 20LF6, 21JS6A/23JS6, 22JF6/22KM6, 22JG6A, 22JR6, 22KV6A, 24JE6C/24LQ6, 26LW6, 26LX6, 27LF6, 29LE6, 30JZ6, 30KD6, 31JS6C, 31LQ6, 31LZ6, 35LR6, 36KD6/40KD6, 36LW6, 36MC6, 40KG6A/PL519, 42KN6, and 8950.

Please check all linear/sweep tubes upon receipt. If there is a problem, please notify us immediately. After your contacting us, we will take the tube back for evaluation by our technician. We will contact you with a decision about replacement or credit after the evaluation. **If the linear/sweep tubes are out of the 10 day warranty period we will not take them back under any circumstances.**

Should it be necessary to return merchandise for exchange or credit, please write, fax, e-mail or call with a reason for the return and you will be given a Return Authorization (RA). **Customer service is available by phone from 8am-10am and 2pm-4pm, Mon.-Fri.** All returns should be sent promptly; all returns must be received by us within 30 days or the RA number will become invalid. The RA number must be placed on the outside of the package being returned in order to assure that your return is handled in a timely manner.

Dealers and Resellers

We suggest you test all tubes or any type of electrical product upon receipt as our warranty does not extend beyond you and ends when you resell the item.

C.O.D. Customers

There is a \$6.50 COD fee on all orders shipping UPS COD service. All orders shipping COD require payment by cashier's check or money order unless payment by check has been arranged with us in advance. If we send an order to you COD and the order is returned to us by UPS for any reason other than an error by us, you are still responsible for UPS shipping charges. You will receive a notice stating that the package was returned. It will tell you why the package was returned and how much is owed in shipping fees. We ask that this amount be paid before another order is shipped to you. You can pay the amount when you place a new order by adding it to the COD total, or you can send a check for the amount owed.

Hours of Operation

We accept phone orders from 8:00 am to 5:00 pm (MST) Monday through Friday and from 9:00 am to 1:00 pm the first and third Saturday of each month (Saturday hours are subject to change, refer to our web site or call for current Saturday hours). Fax orders can be sent 24 hours a day, 7 days a week. You can also browse our products and place orders over the Internet at any time of day or night, by going to our web site at

2 ORDERING TUBES The INS and OUTS

We have over 3000 tube types which are new and stocked for immediate shipment. We stock both new old stock (NOS) and currently manufactured tubes. If you do not find your tube type listed, please contact us. Many types have equivalent numbers which we can cross reference.

Also available are many used tubes in types that have become scarce or expensive. Tube types normally stocked used, as well as new, are listed on page 14. All used tubes have been tested by us and are guaranteed to meet or exceed the minimum industry standards for used tubes. All have been boxed by us in clean white boxes.

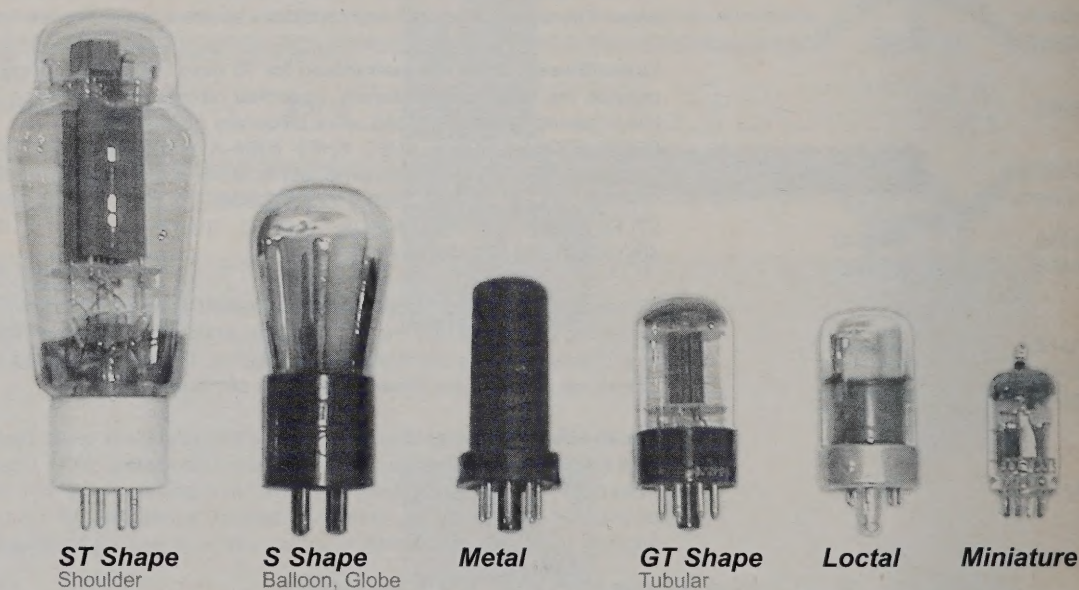
Many tube types are available in different envelope styles and are equivalent electrically. For example, 6A8 is metal, 6A8G is ST shaped large glass and 6A8GT is tubular shaped small glass. See the illustration below for tube styles.

PRICES SHOWN ARE FOR CURRENT STOCK AND ARE SUBJECT TO CHANGE WITHOUT NOTICE. Because most tube types are no longer manufactured, quantities available are limited. Price and availability of tubes with "CALL" under PRICE will be quoted at the time of inquiry. Tubes are designated as "CALL" tubes when there is a low supply or when there are large fluctuations in the market price. Written quotes are good for 15 days. Special quantity pricing is available on some types. Used tube prices are generally about 50% - 60% of the new tube price. We also have some "Down 'n' Dirty" tubes at low prices for the experimenter. Call for price and availability.

WESTERN ELECTRIC TUBES

We can supply some original Western Electric tubes. Please contact us for availability and pricing.

The information on tubes in this catalog is for sales information ONLY. If you are interested in selling tubes to us, please call or fax us to request a current bid list.



Matching & special selection

Most output tubes can be supplied in matched multiples at a charge of \$2.00 per tube, except for low supply, high demand tubes ("CALL" tubes). Matching on "CALL" tubes varies and will be quoted at time of inquiry. We match transconductance and plate current.

Specific brand, construction, or testing can be supplied for an additional \$1.00 per tube.

Our Guarantee

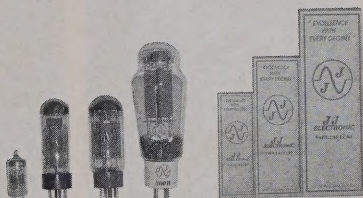
All new tubes (except horizontal amplifier tubes, also known as "linear or sweep tubes") are guaranteed to meet manufacturers specifications for 90 days, except for breakage or when damaged by operation outside manufacturers' specified ratings.

All used tubes are guaranteed to meet minimum industry standards for used tubes and are guaranteed for 30 days. The same exceptions and conditions as noted above for new tubes apply to used tubes.

Linear/sweep tubes are guaranteed for 10 days, except for breakage or when damaged by operation outside manufacturers' specified ratings. See page 1 for a list of linear/sweep tubes.

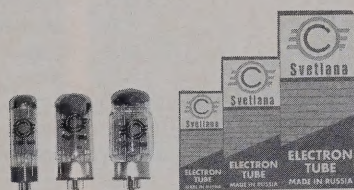
JJ/Tesla Tubes

Tube	1-9	10+
E34L-JJ	\$11.40	\$10.25
EL34-JJ	11.20	10.10
EL84/6BQ5-JJ	8.95	8.10
ECC99-JJ	15.65	14.10
KT88-JJ	41.90	37.75
KT88 Skyblue-JJ	48.90	39.95
6L6GC-JJ	15.60	14.00
12AT7/ECC81-JJ	9.95	8.95
12AU7/ECC82-JJ	8.50	7.65
12AX7-S/ECC83-JJ	8.50	7.65
12DW7/ECC832-JJ	10.95	9.85
300B-JJ	98.00	88.20
6922/E88CC-JJ	9.95	8.95
7027A-JJ	23.45	21.10



Svetlana Tubes

Tube	1-9	10+
EL34-SVET-C	\$17.25	\$15.50
KT88-SVET-C	56.80	51.10
6L6GC-SVET-C	16.55	14.90
6550C-SVET-C	31.70	28.50
12AX7-SVET-C	9.45	8.50



Ruby Tubes

Tube	1-9	10+
EL34B-STR	\$20.55	\$18.50
EL84-R	12.20	10.95
5AR4-C/GZ34	16.65	14.95
5U4G-C	16.65	14.95
6L6GC-STR	18.80	16.95
6V6GT-BC	13.95	12.50



Generic Chinese Tubes

Tube	1-9	10+
5AR4/GZ34-CHINA	\$10.40	\$9.35
5U4G-CHINA	10.85	9.75
6V6GT-CHINA	7.90	7.10
12AT7-CHINA	8.30	7.50
12AU7-CHINA	8.30	7.50
12AX7A-CHINA	9.20	8.25
12AX7-CHINA (Economy)	6.95	6.25
807-CHINA	10.35	9.30
811A-CHINA	12.70	11.50

Valve Art

Tube	1-9	10+
KT66-VA	\$29.70	\$26.75
KT88-VA	27.90	25.10
300B-VA	74.95	62.45
845-VA	44.95	40.45



4 Tubes

What's a CALL Tube?

Tubes with "Call" instead of a price are types that were in low supply at the time this catalog was published, or types which we have a difficult time keeping in stock.

Check our website for current availability and pricing for these tube types.

www.tubesandmore.com

01A (ST)	40.80
0A2	4.30
0A2WA	See 6626/0A2WA
0A3/VR75	5.80
0A4G	20.90
0A5	9.20
0B2	5.50
0B3/VR90	3.10
0C2	7.10
0C3-A/VR105	4.90
0D3-A/VR150	4.60
0E3/85A1	7.60
0G3/85A2	3.50
0Z4-A	3.40
1A1 (ballast)	14.95
1A3	3.10
1A4P	3.30
1A5GT	3.10
1A6	3.50
1A7GT	3.20
1AD2/1BY2A	3.10
1AD4	4.30
1AD5	5.40
1AE4	4.90
1AF4/1AJ4	4.50
1AF5/1AH5	3.90
1AG4	5.40
1AH4	3.90
1AH5	See 1AF5/1AH5
1AJ4	See 1AF4/1AJ4
1AJ5	3.50
1AU2	3.10
1AU3/1N2A	3.10
1AX2	3.10
1AY2	8.50
1B3GT/1G3GTA	4.60
1B4	See 1B4-T/951
1B4T/951	6.40
1B5	5.00
1B23	20.40
1B24	12.70
1B32/532A	12.70
1B35A/6038	38.20
1B37	Call
1B40	19.20
1B56	Call
1B59/R1130B	27.50
1BC2A	5.20
1BG2/DY51	3.10
1BH2A	3.10
1BK2/1RK41	3.10
1BQ2/DY802	3.20
1BX2/1X2-B-C	3.10
1BY2A	See 1AD2/1BY2A
1C1 (ballast)	14.95

1C5GT	3.30
1C6	3.50
1C7G	3.40
1C21	21.90
1D1	6.40
1D7G	3.90
1D8GT	3.10
1D21	30.60
1DG3A	6.70
1DK1	3.90
1DK27	3.10
1DK29	3.10
1DN5	3.20
1E7G	4.00
1EP1	Call
1F1 (ballast)	14.95
1F4	5.40
1F5G	3.40
1F6	3.10
1F7G	4.60
1F34	9.00
1G3GTA	See 1B3GT/1G3GTA
1G4GT	11.20
1G6GT-G	3.50
1H2	3.10
1H4B (ballast)	14.95
1H4G	5.70
1H5GT-G	3.40
1H6G	3.10
1H16 (ballast)	14.95
1H46 (ballast)	14.95
1HM4 (ballast)	14.95
1J1 (ballast)	14.95
1J3/1K3A	5.90
1J5G	5.40
1J6G	9.40
1K3A	See 1J3/1K3A
1L4/DF92	3.10
1L6	39.95
1LA4	4.60
1LA6	6.30
1LB4	6.70
1LC5	3.10
1LC6	3.40
1LD5	4.20
1LE3/1LF3	4.70
1LG5	3.60
1LH4	3.20
1LN5	4.70
1M3/DM70	6.40
1M5G	3.10
1N2A	See 1AU3/1N2A
1N3/DM71	6.50
1N5GT/1P5GT	4.90
1P5GT	See 1N5GT/1P5GT
1P21	Call
1P28	Call
1P29	Call
1P37	24.50
1P39	25.30
1P40	18.40
1P41/924	20.40
1Q5GT	3.10
1R4/1294	3.10
1R5/DK91	6.40
1RK41	See 1BK2/1RK41
1S2-A/DY87	3.30
1S4	3.10

1S5/DAF91	3.10
1SB6GT	5.00
1SX2	7.70
1T2/U37	9.40
1T4/DF91	3.40
1T5GT	3.10
1U4	5.00
1U5	5.90
1U6	Call
1V/6Z3	5.40
1V2	3.30
1V6	4.20
1W4	11.80
1W5	5.10
1X2-B-C	See 1BX2/1X2-B-C
1Z1 (ballast)	14.95
1Z2	7.70
2-01C	61.10
2-25A	Call
2A3	76.10
2A3 (RCA)	91.00
2A4G	5.40
2A5	18.10
2A6	5.80
2A7	7.60
2A12 (ballast)	14.95
2AC15	25.50
2AF4	3.10
2AS2-A	4.90
2AS15A	26.50
2AV2/2BA2	4.40
2AZ2	3.10
2B3	7.10
2B4	7.70
2B7	4.50
2B22	140.50
2B23	9.40
2BA2	See 2AV2/2BA2
2BJ2	5.10
2BN4A	3.10
2BP1	Call
2BU2	6.70
2C21/1642	6.50
2C22/7193	8.10
2C26	5.10
2C33/RX233A	12.30
2C36	40.90
2C39A	See 7289/2C39A
2C39B/6897	See 7289/2C39A
2C40-A	45.90
2C42	Call
2C43/464A	30.00
2C44/464	21.90
2C46	30.60
2C51	See 396A/2C51
2C51W	See 5670/2C51W
2C52	23.60
2C53	51.30
2CN3A-B	3.10
2CW4/2DS4	5.20
2CY5	3.10
2D21/PL21	3.40
2DS4	See 2CW4/2DS4
2DV4	9.80
2DZ4	3.10
2E5	11.60
2E22	43.00
2E24	7.40

2E25	5.90
2E26	6.50
2E31	5.90
2E32	7.10
2E35/502AX	6.40
2E42	7.10
2EG4	9.50
2EN5	3.10
2ER5	3.10
2EV5	See 2EA5
2FH5	3.10
2FQ5A/2GK5	5.10
2FS5	4.30
2FY5	3.50
2G21	16.30
2G22	16.30
2GK5	See 2FQ5A/2GK5
2GU5	4.30
2GW5	5.40
2H20 (ballast)	14.95
2HA5/2HM5	3.90
2HK5/2HQ5	3.50
2HM5	See 2HA5/2HM5
2HQ5	See 2HK5/2HQ5
2K25	Call
2K26	Call
2K28/707B	27.30
2K41	12.30
2K45	Call
2V3G	3.30
2X2A/2Y2/879	3.10
2Y2	See 2X2A/2Y2/879
3-2 (ballast)	14.95
3-4 (ballast)	14.95
3-14 (ballast)	14.95
3-16 (ballast)	14.95
3-38A (ballast)	14.95
3-200A3/592	Call
3A2	3.10
3A3-A-C/3AW3	4.90
3A4	4.60
3A5/DCC90	3.90
3A8GT	5.40
3A20 (ballast)	14.95
3AF4A/3DZ4	3.10
3AL5	3.10
3AT2B	5.50
3AU6	3.10
3AV6	3.10
3AW2A	4.30
3AW3	See 3A3-A-C/3AW3
3B2	4.90
3B4/DL98	3.10
3B22/EL1C	29.30
3B24	16.30
3B25	23.40
3B26	15.30
3B28	36.90
3B29	38.20
3BA6	3.10
3BC5/3CE5	3.10
3BE6	3.10
3BF2	4.60
3BN4A	3.10
3BN6	4.20
3BS2B	See 3BT2/3BS2B
3BT2/3BS2B	6.80
3BU8/3GS8	3.10

3BW2	See 3BT2/3BS2B
3BY6	3.10
3BZ6	3.90
3C2	7.70
3C4/3E5/DL96	5.40
3C6/XXB	3.10
3C22	Call
3C23	39.80
3C24/24G	19.20
3C31	25.50
3C45/6130	70.10
3CA3	3.50
3CB6/3CF6	3.10
3CE5	See 3BC5/3CE5
3CF6	See 3CB6/3CF6
3CN3B	4.60
3CS6	3.10
3CU3A	8.70
3CV3A	6.40
3CX3/3DA3	6.10
3CX100A5	Call
3CY3/3DB3	3.90
3CY5	3.10
3CZ3A	6.10
3D6/1299	8.00
3D21A	40.90
3D21B	40.90
3D21WA/B	40.90
3D21WB	See 7403
3D22	Call
3D23	See TB35/3D23
3DA3	See 3CX3/3DA3
3DB3	See 3CY3/3DB3
3DC3	9.20
3DF3-A	6.40
3DG4	6.10
3DH3	5.00
3DHH12	3.10
3DHH13	3.30
3DJ3	See 3CY3/3DB3
3DK6	3.10
3DR3	12.70
3DS3	11.60
3DT6A	3.10
3DZ4	See 3AF4A/3DZ4
3E5	See 3C4/3E5/DL96
3E29	See 829B/3E29
3EA5	4.20
3EH7/XF183	3.10
3EJ7/XF184	5.40
3ER5/YC95	3.30
3FH5	4.20
3FQ5/3GK5	5.20
3FS5	3.90
3GK5	See 3FQ5/3GK5
3GS8	See 3BU8/3GS8
3GW5	3.10
3HA5/3HM5	4.40
3HK5	See 3HA5/3HM5
3HM5	See 3HA5/3HM5
3HQ5	6.00
3HS8	4.40
3JC6A	6.30
3KT6	4.20
3LF4	3.20
3MP26	9.20
3Q4	5.50
3Q5GT	3.50

3S4/DL92	3.10	4HM6/4JC6A	5.20	5GM6	See 5EW6/5GM6	6AC7/1852	4.20	6AU4GTA	6.40
3T4 (ballast)	14.95	4HQ5	4.20	5GS7	6.40	6AC7WA	See 6134/6AC7WA	6AU5GT	6.70
3TF4 (ballast)	14.95	4HS8/4KF8	3.10	5GX6/5HZ6	3.40	6AC10	6.10	6AU6A/EF94	5.10
3TF4A (ballast)	10.30	4HT6	3.90	5GX7	3.90	6AD6G/6AF6GT	16.90	6AU6WA	See 6136/6AU6WA
3TF7 (ballast)	41.00	4HTF4 (ballast)	14.95	5HA7	3.10	6AD7G	7.00	6AU7-A	6.60
3TF12 (ballast)	14.95	4JC6A	See 4HM6/4JC6A	5HB7	3.10	6AD8/6DC8	5.20	6AU8-A/6BH8	5.50
3TFV4 (ballast)	14.95	4JC6A/4JD6	6.10	5HC7	3.10	6AD10	9.20	6AV5GA	6.30
3V4/DL94	7.70	4JD6	See 4JC6A/4JD6	5HG6	See 5GX6/5HZ6	6AE6G	4.50	6AV5GT	5.00
3V4 (ballast)	14.95	4JH6	See 4BZ6/4JH6	5HG8	3.10	6AE7GT	Call	6AV6/EBC91	3.70
4-25 (ballast)	14.95	4KE8	4.20	5HZ6	See 5GX6/5HZ6	6AF3	3.40	6AV11	5.40
4-65A/8165	88.50	4KF8	See 4HS8/4KF8	5J6/5MHH3	3.10	6AF4A/6DZ4	4.90	6AW6	See 6AU6A/EF94
4-125A/4D21	137.60	4KT6	5.50	5JL6	3.10	6AF6GT	See 6AD6G/6AF6GT	6AW8A	4.50
4-250A/5D22	219.50	4LJ8	6.50	5JW8	3.40	6AF9	6.50	6AX3	3.10
4-400C/6775	Call	4LU6	3.50	5KD8	5.10	6AF11	5.90	6AX4GTB	3.90
4A1 (ballast)	14.95	4MK8	4.20	5KE8	6.50	6AG5	3.10	6AX5GT	5.00
4AU6/4BA6	3.50	4MP12	7.10	5KZ8	4.90	6AG5WA	See 6186/6AG5WA	6AX7	7.70
4AV6	3.30	4MP26	9.20	5LJ8	6.30	6AG7/6AK7	7.60	6AX8	5.10
4B24/EL3C	Call	4PR60A	Call	5MB8	5.50	6AG9	9.10	6AY3B	4.50
4B31	76.40	4PR60B/8252	Call	5MHH3	See 5J6/5MHH3	6AG11	5.10	6AY11	3.30
4BC5/4CE5	3.10	4PR400A	Call	5MK9	10.30	6AH4GT	5.00	6AZ8	11.00
4BC8/4RHH2	3.10	4RHH2	See 4BC8/4RHH2	5R4GA	6.80	6AH6	3.90	6B4G	41.10
4BE6	3.10	4X150A/7034	56.10	5R4GB	12.70	6AH6WA	See 6485/6AH6WA	6B4G (Sovtek)	24.95
4BL8/XCF80	3.10	4X150D/7035	Call	5R4GY-A-B	12.70	6AH7GT	6.70	6B5	Call
4BN6	3.10	4X150G	70.10	5R4WGA-B-Y	7.70	6AH9	6.60	6B6G	7.70
4BQ7A/4BZ7	3.30	4X150R	See 8296/4X150R	5R4WGA-B-Y (Chatham)	12.30	6AJ4	4.40	6B7	6.50
4BS8/4BZ8	3.50	5A10 (ballast)	14.95	5T4	7.50	6AJ5	3.30	6B8	4.50
4BU8	3.20	5AM8	3.90	5T8	3.10	6AJ6	3.90	6B8G	3.50
4BX8	3.10	5AN8	3.10	5U4G/5AS4	23.30	6AJ8/ECH81	6.80	6B10	5.90
4BZ6/4JH6	4.60	5AQ5	5.80	5U4G-C (Ruby)	16.65	6AK5/EF95	3.90	6BA3	5.40
4BZ7	See 4BQ7A/4BZ7	5AR4/GZ34	60.70	5U4G (China)	10.85	6AK5W	See 5654/6AK5W	6BA4	Call
4BZ8	See 4BS8/4BZ8	5AR4-C (Ruby)	16.65	5U4GB	See 5AS4A/5U4GB	6AK6	4.00	6BA5	6.10
4C35A	Call	5AR4 (China)	10.40	5U4WG	See 5931/5U4WG	6AK7	See 6AG7/6AK7	6BA6/EF93	4.70
4CB6/4DE6	4.70	5AR4 (Sovtek)	12.95	5U8	4.60	6AK8/EABC80	6.50	6BA6W	See 5749/6BA6W
4CE5	See 4BC5/4CE5	5AS4A/5U4GB	14.10	5U9/LCF201	4.30	6AK10	5.70	6BA7	9.10
4CS6	3.10	5AS8	3.10	5V3A	See 5AU4/5V3A	6AL3/EY88	6.80	6BA8-A	5.80
4CX250B/7203	136.00	5AT8	3.10	5V4G	13.60	6AL5/6EB5	3.20	6BA11	6.30
4CX250B (Svetlana "S" Logo)	Call	5AU4/5V3A	4.30	5V4GA	11.00	6AL5W	See 5726/6AL5W	6BC4	7.70
4CX250F/7204	Call	5AV8	3.10	5V6GT	3.10	6AL7GT	4.50	6BC5/6CE5	3.60
4CX250K/8245	51.00	5AW4	5.40	5W4	4.70	6AL11	6.00	6BC7	3.50
4CX250R/7580	99.00	5AZ4	3.70	5W4GT	4.50	6AM4	3.30	6BC8/6BZ8	5.40
4CX300A/8167	99.00	5B8	3.10	5X3(ST)	22.90	6AM5/EL91	12.50	6BD4-A	5.40
4CX300Y/8561	Call	5BC3-A	4.90	5X4G	5.40	6AM6/EF91	5.10	6BD5GT	3.60
4CX350F/8322	99.00	5BE8	3.90	5X8	3.10	6AM8A	7.10	6BD6	3.10
4CY5	3.10	5BK7A	3.10	5X9/LCF200	6.40	6AN4	4.70	6BD7	4.50
4D21	See 4-125A/4D21	5BQ7A/5BZ7	3.10	5Y3GT	10.20	6AN5	4.70	6BD7A/EBC81	7.10
4D22	Call	5BR8	See 5CL8A/5BR8	5Y3GT (Sovtek)	8.50	6AN5WA	4.70	6BD11	4.70
4D32	76.40	5BT8	3.10	5Y3WGT	See 6106/5Y3WGT	6AN6	3.30	6BE3/6BZ3	5.90
4DE6	See 4CB6/4DE6	5BW8	3.40	5Y3WGTB	See 6087/5Y3WGTB	6AN7A/ECH80	9.20	6BE6/EK90	4.20
4DK6	3.70	5BZ7	See 5BQ7A/5BZ7	5Y4G	8.50	6AN8A	6.40	6BE6W	See 5750/6BE6W
4DL4	4.20	5C21	See C6J/5C21	5Y4GA	5.40	6AQ4/EC91	13.50	6BF5	3.90
4DT6A	3.90	5C22/6279	Call	5Y4GT	5.40	6AQ5A/6HG5	5.20	6BF6/6BU6	3.10
4E27	49.40	5CG8	4.50	5Z3	9.50	6AQ5W	See 6005/6AQ5W	6BF7	5.40
4EH7/LF183	3.60	5CL8A/5BR8	4.50	5Z4	6.00	6AQ6	3.10	6BF8	3.90
4EJ7/LF184	6.60	5CM8	3.10	6-1H (ballast)	14.95	6AQ7GT	3.10	6BF11	7.60
4ES8	3.10	5CQ8	3.10	6A3	38.20	6AQ8/ECC85	13.50	6BG6G-GA	9.20
4EW6/4GM6	3.10	5CZ5	4.30	6A3 (Sovtek)	19.95	6AR5	10.00	6BH6/E90F	4.30
4GJ7/4GX7	5.50	5D21	Call	6A4	7.80	6AR8	5.50	6BH8	See 6AU8-A/6BH8
4GK5	4.20	5D22	See 4-250A/5D22	6A5	Call	6AR11	4.40	6BH11	5.80
4GM6	See 4EW6/4GM6	5DH8	3.20	6A5G	36.10	6AS5	3.10	6BJ3	3.10
4GS7	5.10	5DJ4	6.60	6A6	6.10	6AS6	4.40	6BJ5	11.40
4GS8	6.40	5EA8/5GH8A	5.80	6A7	11.80	6AS6W	See 5725/6AS6W	6BJ6/E99F	3.90
4GX7	See 4GJ7/4GX7	5ES8	4.00	6A8	11.80	6AS7G/6520	11.70	6BJ7	3.10
4GZ5	4.20	5EU8	3.10	6A8GT	8.90	6AS7G (Svetlana "S" Logo)	17.95	6BJ8	4.90
4HA5/4HM5	3.90	5EW6/5GM6	3.60	6AB4/EC92	4.50	6AS7GA	7.70	6BK4-A-B	8.70
4HA7/4HC7	3.90	5FG7	3.30	6AB5/6N5	12.30	6AS8	4.20	6BK4C/6EL4A	Call
4HC7	See 4HA7/4HC7	5FV8	See 5CL8A/5BR8	6AB7/1853	5.80	6AS11	5.40	6BK5	3.10
4HK5	3.10	5GH8A	See 5EA8/5GH8A	6AC5G	15.90	6AT6/6BK6	3.10	6BK6	See 6AT6/6BK6
4HM5	See 4HA5/4HM5	5GJ7/LCF801	5.50	6AC5GT	11.10	6AT8-A	4.30	6BK7-A-B	5.40

fax: 480.820.4643 OR 800.706.6789 (us & canada only)

6 Tubes

6BK8/EF83	4.70	6CA7	Also See EL34	6DHH12	3.10	6EY6	4.70	6GW6	See 6DQ6A-B/6GW6
6BL6	99.00	6CB5A	5.90	6DJ8 (Tektronix P/N)	3.50	6EZ5	See 6EY5/6EZ5	6GW8/ECL86	7.90
6BL7GTA	8.20	6CB6A/6CF6	3.90	6DJ8/ECC88	9.40	6EZ8	4.40	6GX6/6GY6	4.60
6BL8/6LN8	5.40	6CD3/6CG3	6.60	6DJ8/ECC88 (Mullard gold pin)	Call	6F1	9.40	6GX7	4.50
6BM6	99.00	6CD6G/6DN6	7.40	Call		6F4	9.20	6GX8/EAM86	11.80
6BM8/ECL82	8.50	6CD6GA/6EX6	6.40	6DK6	3.90	6F5/H63	5.40	6GY5	6.30
6BM8 (Svetlana "S" Logo)	12.95	6CD7/EM34	Call	6DL4/EC88	6.70	6F5G	18.80	6GY6	See 6GX6/6GY6
6BN4A	4.40	6CE3	7.10	6DL5/EL95	7.00	6F5GT	5.40	6GY8	3.10
6BN6/6KS6	5.10	6CE5	See 6BC5/6CE5	6DM4	See 6DA4-A/6DM4	6F6	10.00	6GZ5	5.50
6BN8	9.30	6CF6	See 6CB6A/6CF6	6DN6	See 6CD6G/6DN6	6F6G	22.30	6H1N	9.40
6BN11	8.10	6CG3	See 6CD3/6CG3	6DN7	5.70	6F6GT	14.10	6H2N	5.90
6BQ5/EL84	22.50	6CG7/6FQ7	12.40	6DQ3/6DT3	11.30	6F7	5.20	6H6	3.10
6BQ5/EL84 (JJ)	8.95	6CG8-A	5.00	6DQ3A/6DU3	10.10	6F8G	4.50	6H6GT	3.10
6BQ5 (Sovtek)	6.95	6CH3	See 6CJ3/6CH3	6DQ4	5.40	6F15	9.40	6HA5/6HM5	5.20
6BQ6GTB/6CU6	4.20	6CH8	3.90	6DQ5	13.30	6F17	7.10	6HA6/6HB6	6.00
6BQ7A/6BZ7	3.50	6CJ3/6CH3	6.60	6DQ6A-B/6GW6	8.50	6F33	8.10	6HB5	17.40
6BR3/6RK19	3.10	6CJ5/EF41	5.40	6DR7	5.70	6FA7	4.90	6HB6	See 6HA6/6HB6
6BR5/EM80	7.70	6CK3/6CL3	5.90	6DR8/EBF83	3.10	6FC7	3.90	6HB7	5.00
6BR7	19.40	6CK4	9.50	6DS4	See 6CW4/6DS4	6FD6	See 6ES6/6FD6	6HD5	6.10
6BR8A/6FV8	4.90	6CL3	See 6CK3/6CL3	6DS5	3.10	6FD7	4.00	6HD7/6HJ7	3.10
6BS3A	5.40	6CL5	6.10	6DS8/ECH83	5.00	6FG6/EM84	7.00	6HE5/6JB5	6.60
6BS7	11.20	6CL6	6.40	6DT3	See 6DQ3/6DT3	6FG7	5.10	6HF5	18.00
6BS8	5.40	6CL8A	5.10	6DT4	4.90	6FH5	5.40	6HF8	5.40
6BT4/EZ40	7.70	6CM3/6DN3	5.40	6DT5	3.50	6FH8	14.00	6HG5	See 6AQ5A/6HG5
6BU6	See 6BF6/6BU6	6CM4/EC86	5.50	6DT6A	3.40	6FJ7	3.50	6HG8/ECF86	4.60
6BU8/6KF8	4.30	6CM6	6.30	6DT8	3.10	6FM7	4.60	6HJ5	5.20
6BV7	11.40	6CM7	4.60	6DU3	See 6DQ3A/6DU3	6FM8	3.10	6HJ7	See 6HD7/6HJ7
6BV8	6.30	6CM8	4.20	6DV4	10.70	6FQ5A/6GK5	7.60	6HJ8	5.40
6BV11	5.90	6CN6/EL38	20.90	6DW4B	See 6CJ3/6CH3	6FQ7	See 6CG7/6FQ7	6HK5	4.50
6BW3	5.90	6CN7	4.90	6DW5	5.10	6FS5	4.00	6HL8	6.50
6BW4	3.50	6CQ4/6DE4	3.50	6DX8/ECL84	4.70	6FV6	3.10	6HM5	See 6HA5/6HM5
6BW6	11.40	6CQ6/EF92	4.60	6DY5/EL82	5.10	6FV8	See 6BR8A/6FV8	6HM6/6HT6	3.10
6BW7	5.40	6CQ8	5.40	6DZ4	See 6AF4A/6DZ4	6FW5	3.90	6HQ5	See 6HA5/6HM5
6BW8	3.10	6CR6	3.10	6E5	22.50	6FW8	5.00	6HR5	3.10
6BW11	5.90	6CS6/EH90	4.40	6EA4/6EH4A	5.90	6FY5/EC97	5.90	6HS5/6HV5A	10.10
6BX6/EF80	3.10	6CS7	5.20	6EA5/6EV5	8.10	6FY7	5.90	6HS8	See 6BU8/6KF8
6BX7GT	9.80	6CT3	13.10	6EA7/6EM7	6.80	6G5/6U5	35.40	6HT6	See 6HM6/6HT6
6BY4	Call	6CT7/EA42	6.00	6EA8	5.70	6G6G	6.10	6HU6/EM87	5.40
6BY5G	5.40	6CU5	4.30	6EB5	See 6AL5/6EB5	6G11	5.00	6HU8/ELL80	41.30
6BY5GA	3.10	6CU6	See 6BQ6GTB/6CU6	6EB8/6GN8	6.10	6GA7	11.40	6HV5A	See 6HS5/6HV5A
6BY6	5.00	6CU7/ECH42	8.10	6EC4A	8.00	6GB3A	7.70	6HW8	6.30
6BY7/EF85	3.90	6CU8	3.50	6ED4/ED500	11.40	6GB5-A/EL500	6.50	6HZ5/6JD5	6.00
6BY8	3.50	6CV7/EB41	4.70	6EF4/6EJ4-A	10.00	6GB6	11.00	6HZ6	3.50
6BY11	5.40	6CW4/6DS4	14.20	6EH4A	See 6EA4/6EH4A	6GC5	3.70	6J28	3.10
6BZ3	See 6BE3/6BZ3	6CW5/EL86	5.10	6EH5	See 6CA5/6EH5	6GD7	5.10	6J4	3.10
6BZ6/6JH6	5.70	6CX8/6JA8	5.20	6EH7/EF183	4.50	6GE5	8.00	6J5	5.40
6BZ7	See 6BQ7A/6BZ7	6CY5	6.00	6EH8	3.20	6GE8/7734	31.90	6J6A/ECC91	3.50
6BZ8	See 6BC8/6BZ8	6CY7	4.00	6EJ4-A	See 6EF4/6EJ4-A	6GF5	5.40	6J7/EF36	5.10
6C4/EC90	5.10	6CZ5	9.50	6EJ7/EF184	3.20	6GF7A	7.50	6J7GT	4.90
6C4WA	See 6100/6C4WA	6D2	5.40	6EL4A	See 6BK4C/6EL4A	6GH8A	3.90	6J8G	9.40
6C5	3.60	6D4	7.00	6EM5	6.10	6GJ5A	10.70	6J10/6Z10	8.50
6C5G	9.40	6D5	Call	6EM7	See 6EA7/6EM7	6GJ7/ECF801	5.20	6J11	4.90
6C5GT	5.40	6D6	5.10	6EN4	13.30	6GJ8	5.00	6JA5	19.70
6C6	4.20	6D8G	5.40	6EQ7	3.20	6GK5	See 6FQ5A/6GK5	6JA8	See 6CX8/6JA8
6C7	5.40	6D10	6.50	6ER5/EC95	5.90	6GK6	8.20	6JB5	See 6HE5/6JB5
6C8G	3.40	6D22S (Svetlana "S" Logo)	7.95	6ES5	3.10	6GK17	5.70	6JB6-A	28.10
6C9	12.50	6DA4-A/6DM4	3.10	6ES6/6FD6	3.60	6GM5	28.10	6JC5	See 6HE5/6JB5
6C10	17.50	6DA5/EM81	6.70	6ES8/ECC189	7.60	6GM6	5.90	6JC6A	6.00
6C10 (delay relay)	19.95	6DA6/EF89	10.00	6ET6/EF98	3.10	6GM8/ECC86	4.70	6JC8	3.10
6C30 (delay relay)	19.95	6DB5	3.10	6ET7	3.10	6GN8	See 6EB8/6GN8	6JD5	See 6HZ5/6JD5
6C60 (delay relay)	19.95	6DB6	5.10	6EU7	19.80	6GQ7	3.10	6JD6	5.40
6C60T (delay relay)	19.95	6DC6	7.80	6EU8	3.10	6GR7	6.10	6JE6A	51.00
6C90 (delay relay)	19.95	6DC8	See 6AD8/6DC8	6EV5	See 6EA5/6EV5	6GS7	4.90	6JE6C/6LQ6	47.30
6C120T (delay relay)	19.95	6DE4	See 6CQ4/6DE4	6EV7	4.90	6GT5-A	20.40	6JE8	3.20
6CA4/EZ81	11.70	6DE6	3.10	6EW6	6.40	6GU5	3.90	6JF6	10.10
6CA5/6EH5	3.50	6DE7	5.40	6EW7	6.10	6GU7	6.60	6JG5	4.50
6CA7/EL34	Call	6DG6GT/6W6GT	3.30	6EX6	See 6CD6GA/6EX6	6GV5	7.00	6JG6A	41.00
6CA7/EL34 (Mullard)	Call	6DG7/EM85	See EM85	6EY5/6EZ5	4.50	6GV8/ECL85	3.90	6JH5	10.60

6JH6	See 6BZ6/6JH6	6L6GC (Svetlana "C" Logo)	16.55	6P5GT	16.30	6V6G	Call	7L7	3.40
6JH8	6.60	6L6WGB	See 5881/6L6WGB	6P7G	8.10	6V6GT	17.10	7MP18	3.10
6JK5	8.90	6L6WXT (Sovtek)	15.95	6PI45C-SVET	See T-EL509-SVET	6V6GT-BC (Ruby)	13.95	7N7	9.00
6JK6/6JL6	19.50	6L7	4.00	6Q5G	6.10	6V6GT (China)	7.90	7Q7	3.50
6JK8	3.40	6L7G	4.40	6Q7	4.50	6V6GT (EH)	9.95	7R7	4.50
6JL6	See 6JK6/6JL6	6LB6	28.40	6Q7G	9.00	6V7G	5.40	7S7	See 7J7/7S7
6JL8	6.50	6LB8	See 6JT8/6KR8	6Q7GT	4.50	6V8	3.10	7T7	4.40
6JM6-A	6.60	6LC8	3.10	6Q11	See 6K11/6Q11	6V9	3.10	7V7/1231	4.40
6JN6	5.40	6LD20	9.40	6QL6	9.40	6W4GT	3.20	7W7	3.30
6JN8	3.60	6LE8	6.10	6R7	3.50	6W6GT	See 6DG6GT/6W6GT	7X7/XXFM	4.30
6JQ6	4.20	6LF6/6MH6	60.70	6R7G/OM4	4.30	6W7G	5.40	7Y4	3.10
6JR6	34.00	6LF8	8.50	6R7GT	4.30	6X4/EZ90	5.40	7Z4	3.10
6JS6B	Call	6LH6A/6LJ6	9.00	6R8	5.90	6X4WA	See 6202/6X4WA	8A8/9A8/9U8	3.10
6JS6C	49.50	6LJ6	See 6LH6A/6LJ6	6RHH8	See 6KN8/6RHH8	6X5GT/EZ35	4.90	8AC9	3.10
6JTA	33.10	6LJ8	6.40	6RK19	See 6BR3/6RK19	6X8-A	5.00	8AC10	5.80
6JT8/6KR8	5.50	6LM8	6.80	6RP22	5.40	6X9/ECF200	5.40	8AL9	7.10
6JU6	14.70	6LN8	See 6BL8/6LN8	6S2-A/EY87	3.10	6Y5	8.90	8AR11	8.10
6JU8A	5.10	6LO6	See 6JE6C/6LO6	6S4A	4.30	6Y6G	3.60	8AU8A/8BA8A	3.10
6JV8	3.90	6LQ8	5.00	6S7	3.60	6Y6GA	4.90	8AV11	5.10
6JW8/ECF802	6.60	6LR6	41.30	6S7G	4.20	6Y6GT	4.10	8AW8A	8.00
6JX8/ECH84	4.60	6LR8	7.10	6S8GT	3.10	6Y9/EFL200	4.00	8B10	5.10
6JY8	3.50	6LT8	5.10	6SA7	3.30	6Y10	6.40	8BA8A	See 8AU8A/8BA8A
6JZ6	7.40	6LU6	4.50	6SA7GT	3.10	6Z3	See 1V/6Z3	8BA11	7.70
6JZ8	6.50	6LU8	6.80	6SB7-Y	4.60	6Z4/84	8.20	8BH8	6.10
6K5GT	4.40	6LW6	32.20	6SC7	7.00	6Z5/12Z5	5.50	8BM11	5.10
6K6GT	5.20	6LX6	42.10	6SC7GT	6.80	6Z10	See 6J10/6Z10	8BN8	3.10
6K7	4.50	6LX8/LCF802	3.40	6SD7GT	4.60	6ZY5G	5.40	8BN11	5.70
6K7G	5.80	6LY8	4.40	6SF5	4.20	7A4/XXL	6.10	8BQ11	6.50
6K7GT	4.30	6M11	8.00	6SF5GT	4.50	7A5	4.20	8BU11	8.70
6K8	5.40	6MB8	4.60	6SF7	5.00	7A6	3.50	8CB11	6.10
6K8G	4.30	6MD8	6.70	6SG7	5.50	7A7	4.40	8CG7/8FQ7	4.30
6K8GT	5.40	6ME6	44.10	6SG7GT	4.70	7A8	3.20	8CM7	3.10
6K11/6Q11	9.20	6ME8	5.70	6SH7	3.60	7AF7	13.10	8CN7	3.10
6KA8	5.70	6MF8	11.40	6SH7GT	5.40	7AG7/7AH7	5.10	8CS7	3.40
6KD6	46.00	6MG8	5.10	6SJ7	4.50	7AH7	See 7AG7/7AH7	8CW5-A/XL86	4.00
6KD8/6U8A	5.80	6MH6	See 6LF6/6MH6	6SJ7GT	9.50	7AK7	5.70	8CX8	3.10
6KE8	7.60	6MHH3	10.20	6SK7	4.70	7AN7/PCC84	4.20	8D2	9.00
6KF8	See 6BU8/6KF8	6MJ6	69.60	6SK7GT	4.50	7AU7	3.10	8EB8/8GN8	3.40
6KG6A/EL509	22.70	6MJ8	5.70	6SK7WA	See 6137/6SK7WA	7B4	3.30	8EM5	3.10
6KG6A-SVET	See EL509	6MK8	5.40	6SL7GT	8.20	7B5	3.50	8ET7	4.00
(Svetlana)		6ML8	9.40	6SL7GT (Sovtek)	7.50	7B6	4.50	8FQ7	See 8CG7/8FQ7
6KH8/ECLL800	54.80	6MN8	6.50	6SL7WGT	8.30	7B7	9.50	8GJ7/PCF801	4.60
6KL8	3.10	6MQ8	6.10	6SN7GT-B (full base)	14.00	7B8	3.50	8GN8	See 8EB8/8GN8
6KM6	14.70	6MU8	8.70	6SN7GT (brown base)	Call	7C4/1203A	3.90	8HG8	See 7HG8/8HG8
6KM8	3.10	6MV8	7.00	6SN7GT (Sovtek)	7.95	7C5	9.30	8HG8/PCF86	4.40
6KN6	16.90	6N1P (Svetlana "S" Logo)	5.95	6SN7GT (Russia)	5.95	7C7	4.20	8JU8A	3.30
6KN8/6RHH8	19.20	6N02 (delay relay)	19.95	6SQ7	4.70	7D4	5.80	8JV8	5.40
6KR8	See 6JT8/6KR8	6N3	See 6U3/EY80	6SQ7GT	4.30	7DJ8/PCC88	7.50	8KA8	3.40
6KS6	See 6BN6/6KS6	6N03T (delay relay)	19.95	6SR7	4.30	7E5/1201	5.40	8KR8	5.40
6KT6	6.70	6N5	See 6AB5/6N5	6SS7	5.00	7E6	3.30	8LC8	3.10
6KT8	6.60	6N6G	30.00	6ST7	3.10	7E7	3.10	8LS6	4.50
6KU8	3.10	6N7	7.10	6SU7GT/6188	9.10	7EK7/7FC7	3.10	8LT8	4.70
6KV6A	46.30	6N7G	11.20	6T4	3.10	7ES8	4.70	8SN7GTB	4.75
6KV8	4.20	6N7GT	9.20	6T7G	5.70	7EY6	3.30	8U9	4.20
6KX8/ECC808	42.50	6N8/EBF80	6.10	6T8-A	3.10	7F7	10.20	8X9	4.20
6KY8A	8.00	6N08T (delay relay)	19.95	6T9	3.10	7F8	9.00	9-4 (ballast)	14.95
6KZ8	4.60	6N010T (delay relay)	19.95	6T10	6.70	7FC7	See 7EK7/7FC7	9-4A (ballast)	14.95
6L4	9.20	6N015 (delay relay)	19.95	6U3/EY80	3.50	7G7/1232	5.50	9-7 (ballast)	14.95
6L5G	4.90	6N020 (delay relay)	19.95	6U4GT	3.40	7G8	5.40	9A8	See 8A8/9A8/9U8
6L6	19.75	6N020T (delay relay)	19.95	6U5	See 6G5/6U5	7GS7	5.50	9A10 (ballast)	14.95
6L6 (EH)	15.95	6N030 (delay relay)	19.95	6U6GT	5.40	7GV7	5.10	9AH9	8.50
6L6G	34.20	6N030T (delay relay)	19.95	6U7G	3.20	7H4B (ballast)	14.95	9AK8/PABC80	3.10
6L6GB	20.70	6N045 (delay relay)	19.95	6U8A	See 6KD8/6U8A	7H7	4.90	9AM10	6.10
6L6GC	32.00	6N045T (delay relay)	19.95	6U9/ECF201	3.10	7H10 (ballast)	14.95	9AQ8/PCC85	4.60
6L6GC (JJ)	15.60	6N060 (delay relay)	19.95	6U10	6.50	7HG8/8HG8	4.40	9AU7	3.10
6L6GC (RCA black plate)	Call	6N0120 (delay relay)	19.95	6V3-A	3.10	7J7/7S7	4.40	9BJ11	4.70
6L6GC-STR (Ruby)	18.80	6N0120T (delay relay)	19.95	6V4/EZ80	6.70	7K7	7.90	9BR7	3.10
6L6GC (Svetlana "S" Logo)	18.50	6P1	9.40	6V6	15.90	7KY6/9KX6	6.80	9CL8	3.10

fax: 480.820.4643 OR 800.706.6789 (us & canada only)

8 Tubes

9EA8	3.10	11LQ8	6.10	12AY7	10.20	12EG6	5.40	12SQ7	7.10
9ED4/PD500	4.60	11LT8	3.50	12AZ7A	5.70	12EH5	See 12CA5/12EH5	12SQ7GT	6.30
9GH8A	4.70	11LY6	12.90	12B (ballast)	14.95	12EK6	3.10	12SR7/12SW7	4.20
9GV8	3.10	11MS8	6.50	12B4A	4.60	12EL6	3.10	12SR7GT	5.20
9JW8/PCF802	4.50	11R3	3.10	12B7/14A7	4.70	12EM6	5.40	12SW7	See 12SR7/12SW7
9KC6	3.10	11Y9/LFL200	3.60	12B8GT	10.70	12EN6	3.10	12SX7GT	Call
9KX6	See 7KY6/9KX6	12-1H (ballast)	14.95	12BA6/HF93	4.50	12EQ7	3.10	12T10	8.70
9KZ8	3.10	12-3H (ballast)	14.95	12BA7	3.10	12F5GT	3.10	12U7	4.90
9LA6	3.10	12-4 (ballast)	14.95	12BD6	5.40	12F8	3.10	12V6GT	4.60
9MHH3	7.70	12A (ST)	Call	12BE3	3.50	12F60 (delay relay)	19.95	12W6GT	3.90
9ML8	9.20	12A (ballast)	14.95	12BE6/HK90	6.20	12FK6	3.10	12X4	3.10
9MN8	8.10	12A5	4.40	12BF6/12BU6	3.10	12FM6	3.10	12Z3	3.10
9RAL1	4.60	12A6	3.10	12BF11	8.90	12FQ7	6.40	12Z5	See 6Z5/12Z5
9RHR2	3.10	12A7	6.60	12BH7A	18.95	12FQ8	9.60	13A (ballast)	14.95
9U8	See 8A8/9A8/9U8	12A8G	3.30	12BK5	3.10	12FR8	11.00	13B (ballast)	14.95
9V9/PCL200	5.10	12A8GT	3.10	12BL6	3.10	12FX5	4.00	13C (ballast)	14.95
10 (ST)	82.70	12AB5	4.60	12BN6	3.30	12FX8A	3.10	13CW4	20.90
10-4 (ballast)	14.95	12AC5/UF41	6.80	12BQ6GTA-B	3.10	12G (ballast)	14.95	13D (ballast)	14.95
10-25 (ballast)	14.95	12AC6	3.10	12BR7	7.40	12GA6	5.10	13DE7	3.10
10AL11	3.10	12AC10A	7.50	12BS3-A	4.20	12GB7	9.40	13DR7	5.00
10BQ5	5.40	12AD6/12AG6	3.10	12BT3	3.10	12GC6	3.40	13E (ballast)	14.95
10C8	3.10	12AD7	15.30	12BU6	See 12BF6/12BU6	12GE5	7.00	13EM7/15EA7	6.80
10CW5/LL86	3.60	12AE6A	3.30	12BV7/12BY7A	11.40	12GN7A/12HG7	6.60	13FD7	3.50
10DA7	4.00	12AE10	6.80	12BV11	6.40	12GT5	3.20	13FM7/15FM7	4.60
10DE7	5.40	12AF3	5.40	12BY7A	See 12BV7/12BY7A	12GW6	See 12DQ6B/12GW6	13G (ballast)	14.95
10DX8/LCL84	4.20	12AF6	3.60	12BZ6	12.90	12H6	4.00	13GB5/XL500	5.40
10EB8/10GN8	5.80	12AG6	See 12AD6/12AG6	12BZ7	5.70	12HB25	9.20	13GF7A	9.10
10EG7	5.40	12AH7GT	5.40	12C (ballast)	14.95	12HE7	4.60	13J (ballast)	14.95
10EM7	5.40	12AH8	9.60	12C5/12CU5	3.90	12HG7	See 12GN7A/12HG7	13J10/13Z10	8.20
10EW7	4.60	12AJ6	5.40	12C8	3.20	12HL7	6.40	13JZ8-A	5.70
10F1	9.40	12AJ7/HCH81	4.00	12C8GT	3.50	12J5	4.30	13L (ballast)	14.95
10F18	9.40	12AL5	4.50	12C180 (delay relay)	19.95	12J5GT	3.10	13N (ballast)	14.95
10GF7A	8.20	12AL8	3.10	12CA5/12EH5	3.10	12J7GT	3.20	13V10	3.50
10GK6	6.60	12AL11	4.70	12CK3/12CL3	4.00	12J8	3.10	13Z10	See 13J10/13Z10
10GN8	See 10EB8/10GN8	12AQ5	3.10	12CL3	See 12CK3/12CL3	12JB6A	19.20	14A (ballast)	14.95
10GV8/LCL85	4.00	12AS5	3.50	12CN5	3.10	12JF5	18.20	14A4	5.40
10HF8	3.50	12AT6/HBC90	3.30	12CR6	3.30	12JN6-A	5.40	14A5	5.40
10JA5	7.80	12AT7/ECC81	9.60	12CS6	3.10	12JN8	3.10	14A7	See 12B7/14A7
10JA8	4.00	12AT7 (China)	8.30	12CT3	5.90	12JQ6	9.00	14AF7/XXD	6.00
10JT8/10LY8	6.80	12AT7 (JJ)	9.95	12CT8	3.50	12JT6A	5.80	14B6	5.80
10JY8/10LZ8	5.50	12AT7 (RCA)	21.30	12CU5	See 12C5/12CU5	12JZ8	8.10	14B8	3.30
10KR8/10LB8	7.10	12AT7WA	See 6201/12AT7WA	12CU6	See 12BQ6GA	12K5	3.50	14BL11	6.60
10KU8	3.40	12AT7WC	9.95	12CX6	3.10	12K7G	5.00	14BR11	7.00
10LB8	See 10KR8/10LB8	12AU6	3.60	12D4/12DM4	3.10	12K7GT	4.00	14C7	3.50
10LD6	8.70	12AU7 (China)	8.30	12DA6/UF89	6.30	12K8	3.20	14E6	6.30
10LE8	3.10	12AU7 (JJ)	8.50	12DB5	3.10	12KL8	3.10	14E7	4.50
10LT8/10LW8	7.10	12AU7A/ECC82	16.10	12DE8	3.10	12L6GT	3.10	14F7	4.50
10LW8	See 10LT8/10LW8	12AU7A (RCA)	25.95	12DK6	3.50	12MD8	6.40	14F8	4.70
10LY8	See 10JT8/10LY8	12AU7WA	See 6189/12AU7WA	12DK7	5.40	12N03T (delay relay)	19.95	14G6/UBC81	4.20
10LZ8	See 10JY8/10LZ8	12AV5GA	3.10	12DL8	3.40	12N05T (delay relay)	19.95	14GT8/14JG8	3.10
10T1 (ballast)	14.95	12AV6	4.30	12DM4	See 12D4/12DM4	12N075T (delay relay)	19.95	14H7	3.50
10T10	6.30	12AV7	5.70	12DQ4	5.80	12Q7GT	3.40	14J7	3.50
10Y (ST)	82.70	12AW6	3.10	12DQ6-A	8.90	12R5	3.10	14JG8	See 14GT8/14JG8
10Z10	7.80	12AX3	3.20	12DQ6B/12GW6	11.70	12S7/W142	4.60	14K7	4.60
11AF9	10.60	12AX4GTA	3.10	12DQ7	5.40	12S8GT	3.10	14L7/UBC41	5.10
11AR11	5.40	12AX4GTB	3.10	12DS7	5.40	12SA7	6.00	14N7	3.20
11B (ballast)	14.95	12AX7 (European)	12.30	12DT5	3.10	12SA7GT	4.40	14Q7	3.50
11BQ11	5.70	12AX7 (Mullard)	64.20	12DT8	6.80	12SC7	3.10	14R7	3.50
11BT11	9.00	12AX7-A (US)	14.20	12DU7	3.10	12SF5	3.90	14S7	3.50
11CA11	8.10	12AX7 (China)	6.95	12DV7	3.30	12SF5GT	5.40	14W7	4.50
11CF11	11.20	12AX7-S (JJ)	8.50	12DV8	4.60	12SF7	5.40	14X7	3.50
11CH11	9.20	12AX7 (Svetlana "C" Logo)	9.45	12DW7/7247	20.95	12SG7	5.40	14Y4	5.40
11CY7	4.40	12AX7A (Ampx. Bugle Boy)	Call	12DW7 (JJ)	10.95	12SH7	5.90	15	20.90
11DS5	7.50	12AX7A (RCA)	26.80	12DW8	5.40	12SJ7	3.50	15A6/PL83	3.50
11FY7	9.20	12AX7A (China)	9.20	12DZ6	5.40	12SK7	4.70	15AF11A	4.20
11HM7	6.50	12AX7 (EH)	11.95	12EA6/12EK6	5.40	12SK7GT	5.00	15BD11A	6.70
11JE8	3.10	12AX7LPS (Sovtek)	11.95	12EC8	3.10	12SL7GT	4.50	15CW5/PL84	5.20
11KV8	6.30	12AY3A	3.40	12ED5	5.40	12SN7GT-A-B	7.50	15DQ8/PCL84	4.70

15E	12.90	17KW6/PL508	10.20	22JF6/22KM6	10.00	27BL8/UCF80	5.10	40KG6A/PL519	16.50
15EA7	See 13EM7/15EA7	17LD8	9.20	22JG6A	10.10	27GB5/PL500	6.60	41-7E (ballast)	14.95
15EW7	3.50	17RK19	See 17BR3/17RK19	22JR6	7.10	27LF6	46.00	41 (tubular)	11.20
15FM7	See 13FM7/15FM7	17W6GT	3.10	22JU6	8.20	28D7-W	6.40	41 (ST)	14.10
15FY7	5.40	17X10	See 17AB10/17X10	22KM6	See 22JF6/22KM6	29KQ6	12.00	42 (globe)	Call
15HB6	5.40	17Y9	10.10	22KV6A	7.80	29LE6	12.70	42-2H (ballast)	14.95
15KY8A/17DL8	4.70	17Z3/PY81	3.10	23JS6	See 21JS6A/23JS6	30	19.70	42 (ST)	20.30
15LE8	3.10	18A5	3.10	23Z9	7.70	30 SPECIAL	Call	42EC4-A	7.90
15MF8	8.50	18AJ10	3.10	24A (ST)	12.00	30AE3/PY88	6.80	42KN6	9.40
15MX8	9.00	18FW6A	3.10	24BF11	4.20	30AG11	4.20	43	6.80
15R	20.40	18FX6A	3.10	24JE6A	12.60	30JZ6	15.80	45	84.95
16-4 (ballast)	14.95	18FY6-A	3.10	24JE6C/24LQ6	23.60	30KD6	30.60	45 SPECIAL	Call
16A8/PCL82	8.50	18GB5	5.40	24JZ8	5.00	30MB6	13.40	45A5/UL41	20.50
16AK9	9.00	18RAL1	3.10	24LQ6	See 24JE6C/24LQ6	31	15.75	45B5/UL84	4.40
16AQ3/XY88	4.60	19	6.60	25A6	4.50	31A3/UY41	8.10	45Z3	3.10
16BQ11	3.10	19AQ5	6.40	25A6G	4.30	31AL10	5.70	45Z5GT	4.40
16BX11	3.10	19AU4GTA	4.30	25A6GT	4.30	31JS6A	14.80	46 (ST)	22.30
16CB28	7.70	19BG6G-GA	6.10	25A7GT	5.70	31JS6C	18.00	46B1 (ballast)	14.95
16GK6	3.10	19BY7/UF85	7.70	25AC5G	8.20	31LQ6	18.00	47 (ST)	19.70
16GY5	4.00	19C8	3.10	25AC5GT	4.50	31LR8	8.10	48	17.70
16KA6	5.40	19CG3	5.70	25AV5GA	7.50	31LZ6	17.50	49	12.90
16LU8A	10.10	19CL8A/19JN8	3.50	25AV5GT	7.50	32	6.10	50 (ST)	273.00
16Y9	9.20	19D8/UCH81	3.40	25AX4GT	3.90	32ET5A	5.40	50A1/D5TF30	Call
17	Call	19DE3	4.90	25BB14	4.20	32HQ7	5.00	50A1TR	16.90
17A8/19EA8A	3.10	19DK3	5.80	25BK5	3.10	32L7GT	4.70	(solid state replacement for 50A1)	
17AB9	5.40	19DQ3	6.70	25BQ6GT	3.60	33	6.10	50A5	3.50
17AB10/17X10	6.00	19EA8A	See 17A8/19EA8A	25BR3/U329	5.10	33GT7	5.10	50B5	3.10
17AV5GA	5.00	19EZ8	3.50	25C5	5.90	33GY7A	11.40	50BM8/UCL82	5.40
17AX3	3.10	19FL8/UBF89	5.50	25C6G	4.20	33JR6	7.70	50C5	4.30
17AX4GTA	3.10	19FX5	5.10	25CA5	4.50	33JV6	5.20	50DC4	3.20
17AY3/17BS3A	4.00	19GQ7	3.10	25CD6GB	7.10	34	4.30	50EH5	5.10
17BE3/17BZ3	4.60	19HR6	3.10	25CG3	7.50	34CD3/34CE3	3.90	50FA5/50FK5	3.10
17BF11	7.80	19HS6	5.40	25CK3	4.00	34CE3	See 34CD3/34CE3	50FK5	See 50FA5/50FK5
17BH3	5.10	19HV8	6.10	25CT3	3.10	34DK3	8.60	50GY7	9.20
17BQ6GTB	4.20	19J6	3.10	25CU6	10.20	34GD5A	3.10	50HK6	3.50
17BR3/17RK19	6.40	19JN8	See 19CL8A/19JN8	25DK3	4.00	34R3	3.10	50HN5	9.20
17BS3A	See 17AY3/17BS3A	19KG8	3.10	25DK4	3.10	35-51	5.80	50L6GT	6.80
17BW3	6.10	19MR9	3.50	25DL3	9.20	35A3	9.40	50X6	3.90
17BZ3	See 17BE3/17BZ3	19Q9	3.10	25DN6	3.90	35A5	5.40	50Y6GT	3.10
17C5/17CU5	3.10	19T8	6.80	25DQ6A	3.30	35B5	3.10	50Y7GT	4.20
17C8/UBF80	3.50	19V8	4.30	25EH5	3.30	35C5	3.40	52	38.20
17C9	7.70	19X3	5.10	25F5	3.10	35DZ8	5.40	53	9.20
17CK3	4.60	19X8	3.10	25HX5	7.50	35EH5	5.40	53HK7	8.00
17CT3	5.40	20-4 (ballast)	14.95	25JZ8	8.70	35GL6	4.50	55	5.50
17CU5	See 17C5/17CU5	20AQ3/LY88	5.40	25L6GT/25W6	5.90	35HB8	3.10	56	5.70
17D4A/17DM4A	3.10	20EZ7	5.40	25T/HK-24	58.60	35L6GT	5.40	57	4.90
17DE4	3.10	20LF6	67.40	25W4GT	3.10	35LR6	20.90	59	12.60
17DL8	See 15KY8A/17DL8	20X672	9.40	25W6	See 25L6GT/25W6	35T	98.20	60-92-3 (ballast)	14.95
17DM4A	See 17D4A/17DM4A	21A6/21B6	6.50	25W6GT	5.50	35W4	7.20	60-92A (ballast)	14.95
17DQ6B/17GW6	6.70	21B (ballast)	14.95	25Y5	3.90	35Y4	3.90	60FX5	3.50
17DW4A	4.60	21B6	See 21A6/21B6	25Z5	4.20	35Z3	4.60	61BT	11.40
17EW8/HCC85	3.10	21EX6	4.60	25Z6GT	4.30	35Z4GT	3.50	70L7GT	4.90
17GE5	4.60	21GY5	5.70	26 (ST)	18.10	35Z5GT	5.50	71A (ST)	38.20
17GJ5-A	6.10	21HB5A	13.70	26A6	5.70	35Z6G	7.00	72	4.20
17GT5A	5.90	21HJ5	17.70	26A7GT	8.60	36	6.80	73	6.10
17GV5	5.40	21JS6A/23JS6	22.50	26AQ8/UCC85	4.30	36AM3B	3.10	75 (ST)	15.70
17GW6	See 17DQ6B/17GW6	21JV6	5.40	26C2T (delay relay)	19.95	36KD6/40KD6	26.40	75C1	11.40
17H3	3.10	21JZ6	7.90	26C6	6.10	36LW6	15.20	75TH	Call
17JB6A	10.60	21KA6	14.30	26C90T (delay relay)	19.95	36MC6	19.80	76 (ST)	14.80
17JF6	8.10	21KE6	5.10	26C150 (delay relay)	19.95	37	6.40	77	4.00
17JG6-A	7.40	21LG6A	8.90	26D6	6.10	38	4.60	78	5.80
17JK8	3.10	21LR8	8.90	26HU5	21.90	38A3/UY85	3.50	79	4.30
17JM6	10.50	21LU8	9.20	26LW6	22.30	38HE7/38HK7	10.00	80 (ST)	22.90
17JN6	6.60	22	10.20	26LX6	18.20	38HK7	See 38HE7/38HK7	80 (tubular)	12.70
17JQ6-A	10.70	22-4 (ballast)	14.95	26N02T (delay relay)	19.95	39-44	3.50	82 (ST)	15.50
17JT6A	5.40	22BH3A	3.10	26N015 (delay relay)	19.95	40A1 (ballast)	14.95	83	24.20
17JZ8	8.50	22BW3	5.90	26N075 (delay relay)	19.95	40B2 (ballast)	14.95	83V	14.80
17KV6A	9.40	22DE4	6.40	27 (ST)	10.10	40KD6	See 36KD6/40KD6	84	See 624/84

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10 Tubes

85	4.30	256	Call	481B	61.10	809	44.10	1038	See 6438/1038
85A1	See 0E3/85A1	262A-B (WE)	Call	484	51.00	810	Call	1054	7.70
85A2	See 0G3/85A2	272A (WE)	Call	501 (delay relay)	19.95	811A (China)	12.70	1201	See 7E5/1201
85AS	12.70	274A (WE)	Call	502A	13.30	811A (US)	44.60	1203A	See 7C4/1203A
89Y	4.30	275A (WE)	204.80	502AX	See 2E35/502AX	812A (China)	19.95	1217	3.10
95A1	6.10	297A (WE)	9.40	512AX	12.30	812A (Svetlana "S" Logo)	39.95	1229	See 932/1229
112A	38.80	300B (JJ)	98.00	518AX	11.40	812-A	60.10	1231	See 7V7/1231
115C2T (delay relay)	19.95	300B (EH)	90.00	520A	See 5755	813 (China)	24.95	1232	See 7G7/1232
115C3 (delay relay)	19.95	300B (Sovtek)	83.00	526AX	9.20	813	47.20	1236	20.70
115C3T (delay relay)	19.95	300B (Valve Art)	74.95	527AX	9.20	814	25.50	1237	37.40
115C5 (delay relay)	19.95	300B (WE)	Call	532A	See 1B32/532A	815	15.30	1252	See 6KD8/6U8A
115C15T (delay relay)	19.95	304TH	Call	533AX	10.20	816	24.40	1258	Call
115C30 (delay relay)	19.95	310A-B (WE)	Call	534AX	10.20	826	41.10	1280	9.00
115C30T (delay relay)	19.95	311A-B (WE)	Call	543	14.70	828	76.40	1294	See 1R4/1294
115C45 (delay relay)	19.95	313C-CA	5.10	547DX	10.80	829B/3E29	17.90	1299	See 3D6/1299
115C45T (delay relay)	19.95	313CC (ballast)	14.95	548DX	See 6418/548DX	832A	8.10	1603	82.80
115C60 (delay relay)	19.95	316A	41.40	572B/160L	Call	836	26.60	1608	Call
115C60T (delay relay)	19.95	323A-B	10.20	572B (China)	59.40	837	8.10	1612	4.90
115C90 (delay relay)	19.95	327A	19.20	572B (Svetlana "S" Logo)	79.00	838	Call	1613	8.50
115C90T (delay relay)	19.95	328A	11.70	577	Call	843	Call	1614	30.80
115C120 (delay relay)	19.95	328A (WE)	44.10	578	See 8020/451	845 (Valve Art)	44.95	1616	8.10
115C150 (delay relay)	19.95	331A	See 805/331A	579B	35.40	845 (China)	34.95	1619	9.20
115C180 (delay relay)	19.95	337A (WE)	63.10	592	See 3-200A3/592	860	Call	1620	11.20
115F90T (delay relay)	19.95	348A (WE)	Call	604/7014	133.80	864	35.40	1625	5.10
115N02T (delay relay)	19.95	350B	Call	604L/7015	Call	865	20.40	1626	4.20
115N03T (delay relay)	19.95	350B (WE)	Call	610/7723	Call	866A	20.90	1629	8.50
115N05 (delay relay)	19.95	352A (WE)	Call	615/7018	Call	866AX	20.40	1633	5.10
115N05T (delay relay)	19.95	353A (WE)	8.90	619	Call	866JR	Call	1635	5.40
115N010T (delay relay)	19.95	354A (WE)	38.20	623	Call	868/PJ23	18.40	1641/RK60	9.20
115N015 (delay relay)	19.95	359-A	28.40	627	114.60	872-A	61.10	1642	See 2C21/1642
115N020 (delay relay)	19.95	371B	20.40	629	Call	873	Call	1654	11.40
115N030 (delay relay)	19.95	375A (WE)	17.90	631P1/SN4	38.20	874 (ST)	9.20	1852	See 6AC7/1852
115N030T (delay relay)	19.95	377A (WE)	17.70	632B	96.90	876	25.50	1853	See 6AB7/1853
115N045T (delay relay)	19.95	381A (WE)	20.40	635/7019	66.30	878A	15.30	1917	See NL842/1917
115N060T (delay relay)	19.95	384A	10.20	635L/7020	Call	879	See 2X2A/2Y2/879	2022	15.30
115N075T (delay relay)	19.95	393A	Call	635P	Call	884	9.20	2033	6.00
115N090T (delay relay)	19.95	394A	20.40	649	See 5834	885	6.10	2050 (ST)	18.00
115N0120T (delay relay)	19.95	395A	15.30	672A	88.50	886	Call	2050A (tubular)	18.00
117L7	6.10	396A/2C51	6.10	703A	20.40	917	24.40	2050W	18.00
117N7GT	6.60	396A/2C51 (WE)	24.20	704A	19.20	918/CE-1C	23.40	2051	11.80
117P7GT	5.50	398A (WE)	Call	705A	13.10	919	25.50	3533	9.20
117Z3	5.40	399A-B	12.30	707B	See 2K28/707B	920	16.30	4001	12.70
117Z4GT	4.30	400A-B	12.30	709A	21.90	921	6.10	4042	Call
117Z6GT	6.10	401A	See 5590/401A	710/6011	102.50	922	Call	4043	Call
120	41.70	403A (WE)	12.70	710L/7509A	Call	924	See 1P41/924	4046-A	38.20
120A (ballast)	14.95	403B	See 5591/403B	713A	5.90	925	20.40	4049D	See AH221/CV5
121B (ballast)	14.95	404A	See 5847/404A	714/7021	51.30	926	20.40	4121A	19.20
124A	38.20	408A	See 6028/408A	715A-B-C	76.40	927/CE25C-D	Call	4422	Call
150B2	7.70	409A	6.40	716/6855	Call	928	Call	4425	Call
150B3	6.40	412A/6754	9.20	717A	20.40	929	14.80	4621	Call
150C2	See 0A2/150C2	412A (WE)	Call	719A	5.40	930	9.20	4652	See 8042/4652
150C4	3.10	413B	25.50	724B	18.40	931A-B	42.10	4657	See 8072
160L	See 572B/160L-US	415A	4.60	726A-B-C	11.20	932/1229	5.10	4687A	10.20
171-A	Call	416D	26.00	734/5544	Call	934	33.60	5092/8421	Call
183/483	Call	417A (WE)	Call	734L	89.20	935	104.50	5514	28.40
203A	114.60	418A	Call	740L	Call	951	See 1B4-T/951	5516	15.30
210	Call	420A (WE)	64.80	760/6858	133.80	954	7.00	5517	15.30
211/VT-4C	182.70	421A (WE)	Call	770L	Call	955	5.10	5544	See 734/5544
211-4 (ballast)	14.95	422A (WE)	193.20	800	Call	956	9.20	5545	Call
213A	30.60	426A	8.10	801-A	102.60	957	7.00	5550/GL415	Call
221A	20.40	427A	5.10	802	12.30	958	8.10	5557/FG-17	Call
222	Call	429A	14.10	803	30.60	959	9.20	5558/FG-32	56.60
226	26.00	430C (WE)	7.70	804	19.20	967	See 5557/FG-17	5559/FG-57	51.00
227	Call	443A (WE)	7.70	805/331A	102.00	991	3.10	5560/FG-95	76.40
231	Call	446A	7.70	807	16.40	1005	14.70	5561/FG-104	Call
232	Call	451	See 8020/451	807 (China)	10.35	1006	Call	5581	18.40
246	70.80	464	See 2C44/464	807W	See 5933/807W	1007	3.10	5582	35.60
250R	Call	464A	See 2C43/464A	808	Call	1026	19.20	5590/401A	5.40

5591/403B	11.70	5839	7.70	6080WC	9.90	6339	Call	6855	See 716/6855
5608A	Call	5840/6225	12.30	6082-A	15.00	6342A	Call	6858	See 760/6858
5610	6.10	5842	See 5842/417A	6083/AX9909	206.70	6350	Call	6859	See 760P
5632	See C3J/5632	5842/417A	12.70	6084/E80F	33.10	6352	11.40	6870	Call
5636	8.10	5844	7.00	6085/E80CC	52.30	6354	12.70	6872	12.70
5641	11.70	5845	5.10	6086	10.20	6360-A	9.40	6877	63.70
5642	8.10	5847/404A	21.90	6087/5Y3WGTB	12.70	6360-A (Telefunken)	15.90	6883B/8552	19.20
5643	11.70	5851	12.70	6095	5.40	6374/EY84	12.30	6884	Call
5644	20.40	5857	Call	6096	See 5654/6AK5W	6384	47.70	6895	Call
5647	17.30	5861/EC55	102.00	6097	See 5726/6AL5W	6386	Call	6897	See 2C39B/6897
5651A	3.40	5869/9950	Call	6099	4.60	6405	22.50	6900 (Bendix)	Call
5653	14.20	5876A	25.50	6100/6C4WA	3.90	6414	11.20	6907	80.60
5654/6AK5W	3.90	5877	82.80	6101/6J6WA	3.30	6418/548DX	12.30	6909	15.30
5656	15.30	5879	10.20	6106/5Y3WGT	10.90	6438/1038	9.00	6910	20.40
5659	3.10	5881 (Sovtek)	8.95	6110	9.20	6442	Call	6919	5.10
5660	3.10	5881 (Tung Sol)	Call	6112	17.70	6476A	40.90	6922/E88CC	10.10
5661	5.40	5881/6L6WGB	28.10	6115A	319.10	6481	Call	6922 (JJ)	9.95
5662	5.10	5881WXT (Sovtek)	9.95	6118	4.50	6483	9.00	6922 (Sovtek)	12.95
5663	3.20	5886	82.20	6130	See 3C45/6130	6485/6AH6WA	4.40	6923/EA52	61.10
5664	See C1B-A/5664	5889	51.00	6132	See CV4055/6132	6489/EA76	10.20	6929	Call
5670/2C51W	7.80	5893	Call	6134/6AC7WA	9.40	6508	Call	6931	3.10
5672/DL69	5.70	5894/AX9903	65.80	6136/6AU6WA	4.20	6519	7.70	6939	32.60
5675	Call	5895	38.20	6137/6SK7WA	5.90	6520	See 6ASTG/6520	6945	5.40
5676	7.70	5901	See 5840/6225	6140	9.40	6528-A	76.40	6948	19.20
5678	3.10	5902	8.10	6145	10.20	6533	15.30	6957	10.20
5679	9.20	5903	5.10	6146-A	21.20	6542	35.60	6973	33.60
5684	See C3JA/5684	5905	17.70	6146B/8298A	29.95	6550-A (US)	Call	6977/DM160	13.30
5685	See C6J-K/5685	5906	9.20	6146B (China)	16.95	6550 ST (US)	Call	7009	71.40
5686	8.60	5907/6056	6.40	6146W/7212	Call	6550C (Svetlana "S" Logo)	32.95	7014	See 604/7014
5687	4.20	5915	4.60	6151	See 5744/6151	6550C (Svetlana "C" Logo)	31.70	7015	See 604L/7015
5690	77.00	5916	5.40	6153	15.30	6550WD (Sovtek)	19.95	7018	See 615/7018
5691 (black/brown base)	23.60	5920/E90CC	9.20	6155	107.00	6550WE (Sovtek)	22.95	7019	See 635/7019
5691 (red base)	42.00	5931/5U4WG	28.40	6156	Call	6587	Call	7020	See 635L/7020
5692 (black/brown base)	Call	5932	31.90	6159B	17.50	6611	5.90	7021	See 714/7021
5692 (red base)	Call	5933/807W	16.90	6161	Call	6626/0A2WA	4.00	7022	See 770L
5693	16.30	5947	10.20	6167	Call	6628	5.10	7025	24.70
5696-A	4.20	5960	Call	6173	31.90	6661/6BH6	7.50	7025B (Sovtek)	9.95
5702	12.40	5961	Call	6177A	Call	6662/6BJ6	5.40	7027-A	55.10
5703	8.10	5962	3.10	6186/6AG5WA	6.00	6664/6AB4	3.50	7027A (JJ)	23.45
5704	9.20	5963/12AU7A	5.40	6188	See 6SU7GT/6188	6669/6AQ5A	3.90	7034	See 4X150A/7034
5718-A/EC70	8.70	5964	3.30	6189/12AU7WA	10.60	6676/6CB6A	3.90	7035	See 4X150D/7035
5719	11.70	5965-A	3.10	6199	Call	6677/6CL6	3.50	7036	7.80
5721/QK209	88.00	5972	5.40	6201/12AT7WA	9.00	6678/6U8A	5.40	7043/CE881	Call
5722	14.10	5979	51.30	6202/6X4WA	4.60	6679/12AT7	9.00	7044	9.20
5725/6AS6W	3.40	5980	Call	6203	10.20	6680/12AU7A	5.40	7056	6.40
5726/6AL5W	6.30	5987/SC968B	16.50	6206	15.30	6681/12AX7A	16.10	7057	5.10
5727	3.10	5991	See 8422/5991	6211A	4.20	6686/E81L	8.10	7061	4.30
5744/6151	11.20	5992 (Bendix)	Call	6213	9.00	6687/E91H	8.10	7062/E180CC	9.20
5749/6BA6W	3.50	5998	22.40	6216	7.10	6688/E180F	9.20	7077	Call
5750/6BE6W	3.50	5998A	21.20	6217	Call	6688 E180F (gold pins)	12.20	7094	Call
5750-S	Call	6000	Call	6218	Call	6689/E83F	12.90	7117	31.90
5751	10.30	6004/U50	3.40	6225	See 5840/6225	6754	See 412A/6754	7119/E182CC	14.80
5755/520A	9.50	6005/6AQ5W	5.50	6227/E80L	45.90	6760	9.40	7153	Call
5763	12.30	6011	See 710/6011	6236	Call	6761	10.20	7167	4.20
5767	70.10	6012	89.20	6247	13.80	6771	Call	7189-A	34.95
5783	8.10	6014	See C1K/6014	6252	51.30	6775	See 4-400C/6775	7193	See 2C22/7193
5784	5.40	6021	5.40	6263A	44.60	6777	89.20	7199	30.60
5785	5.10	6028/408A	3.10	6265	6.50	6779/Z803U	Call	7199 (Sovtek)	16.95
5796	38.20	6038	See 1B35A/6038	6267/EF86	35.00	6788	3.10	7203	See 4CX250B/7203
5814A	5.30	6045	11.20	6267 (Russia)	12.95	6802	16.30	7204	See 4CX250F/7204
5820	Call	6050	7.70	6267 (Svetlana "S" Logo)	14.95	6807	143.80	7212	See 6146W/7212
5823/Z900T	29.30	6060/ECC801	11.40	6279	See 5C22/6279	6814	3.10	7233	12.00
5824	18.40	6062/M8096	9.20	6286	4.20	6816	63.70	7235	140.50
5825	Call	6064	4.60	6293	25.50	6829	12.30	7236	44.00
5829	13.30	6065	6.10	6299	Call	6832	7.70	7239	56.10
5834	39.60	6072-A	15.30	6303A	Call	6842	35.60	7247	See 12DW7/7247
5836	Call	6073	5.40	6328	51.00	6844A	32.60	7258	4.20
5837	166.30	6080	9.20	6336-A-B	63.10	6850	35.60	7262A	Call

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7271	Call	8000	Call	8765	Call	DAF41	7.70	EAM86	See 6GX8/EAM86
7289/2C39A	40.90	8005	154.00	8844	Call	DAF91	See 1S5/DAF91	EB41	5.10
7296	Call	8008	Call	8906	89.20	DAF96	See 1AF5/1AH5	EB91	See 6AL5/6EB5
7306A	See C3JA/5684	8011	Call	8950	Call	DC90	9.10	EBC41	See 6CV7/EBC41
7316	28.40	8012-A	28.40	8964	63.70	DC90	See 3A5/DC90	EBC81	See 6BD7A/EBC81
7322	Call	8013-A	35.60	8965	25.50	DF91	See 1T4/DF91	EBC91	See 6AV6/EBC91
7323	6.40	8020/451	63.00	9001	6.10	DF92	See 1L4/DF92	EBF80	See 6N8/EBF80
7327	10.20	8025-A	Call	9002	6.10	DF96	See 1AF4/1AJ4	EBF83	See 6DR8/EBF83
7355	19.50	8032A	See 6883B/8552	9003	6.10	DG7-32	100.30	EBF89	See 6AD8/6DC8
7360	52.50	8035	25.50	9004	6.10	DG1672	Call	EC54/CV66	5.40
7363	Call	8042/4652	12.30	9005	11.20	DK91	See 1R5/DK91	EC55	See 5861/EC55
7377/QQE04-5	61.10	8049	15.30	9006	3.50	DL69	See 5672/DL69	EC70	See 5718-A/EC70
7403/3D21WB	Call	8056	24.40	9950	See 5869/9950	DL92	See 3S4/DL92	EC86	See 6CM4/EC86
7408/6V6GT	19.70	8058	45.90	17241	Call	DL94	See 3V4/DL94	EC88	See 6DL4/EC88
7410	16.30	8068	61.30	18042	See 6086	DL96	See 3C4/3E5/DL96	EC90	See 6C4/EC90
7462	Call	8072	165.20	18046	7.70	DL98	See 3B4/DL98	EC91	See 6AQ4/EC91
7475	3.10	8106	13.80	38142	See 45-SPECIAL	DM71	See 1N3/DM71	EC92	See 6AB4/EC92
7509A	See 710L/7509A	8113/6CY5	53.10	A1714	5.40	DM160	See 6977/DM160	EC95	See 6ER5/EC95
7533	Call	8116	Call	A2134	7.70	DR2000	15.30	EC97	See 6FY5/EC97
7534/E130L	44.00	8117A	Call	A2226	Call	DR2010	17.50	EC900	See 6HA5/6HM5
7543/E130LF	4.60	8121	96.90	A2293	14.70	DR2020	12.30	ECC40	13.50
7548	35.60	8156	20.40	AC701	276.20	DR2100	17.50	ECC81	See 12AT7/ECC81
7550	7.70	8165	See 4-65A/8165	AH221/CV5	5.10	DR2115	7.70	ECC82	See 12AU7A/ECC82
7551	9.20	8167	See 4CX300A/8167	ARP19	5.40	DR2120	8.70	ECC83	See 12AX7A/ECC83
7554	56.10	8168	255.10	AX9903	See 5894/AX9903	DR2200	11.20	ECC85	See 6AQ8/ECC85
7558	10.20	8203	Call	AX9909	See 6083/AX9909	DR2210	12.30	ECC86	See 6GM8/ECC86
7580	See 4CX250R/7580	8223/E288C (gold pins)	29.50	AX9912	See 5C22/6279	DY51	See 1BG2/DY51	ECC88	See 6DJ8/ECC88
7580W	See 4CX250R/7580	8223/E288CC	Call	AZ41	10.40	DY80	See 1BX2/1X2-B-C	ECC91	See 6J6A/ECC91
7581A/KT66	Call	8226	Call	B5866	Call	DY86	See 1S2-A/DY87	ECC99 (JJ)	15.65
7586	35.60	8228/ZZ1000	9.60	B5991	See 8422/5991	DY87	See 1S2-A/DY87	ECC189	See 6ES8/ECC189
7587	42.10	8233/E55L	41.80	BH	Call	DY802	See 1BQ2/DY802	ECC803S (Tesla)	12.95
7591A	79.95	8236	Call	BIP8806-1	Call	E34L (JJ)	11.40	ECC804	9.40
7591A (EH)	24.95	8245	See 4CX250K/8245	BK42DG (ballast)	14.95	E34L Blue Glass (JJ)	12.95	ECC808	See 6KX8/ECC808
7609	Call	8252	See 4PR60B/8252	BKV51DJ (ballast)	14.95	E55L	See 8233/E55L	ECF80	See 6BL8/6LN8
7643/E80CF	30.00	8255/E88C	15.30	BR	16.70	E80CC	See 6085/E80CC	ECF82	See 6KD8/6U8A
7645	Call	8296/4X150R	Call	BX1000	Call	E80CF	See 7643/E80CF	ECF83	9.20
7687	29.40	8298A	See 6146B/8298A	C1A	88.50	E80F	See 6084/E80F	ECF86	See 6HG8/ECF86
7693	12.30	8322	See 4CX350F/8322	C1B-A/5664	25.50	E80L	See 6227/E80L	ECF200	See 6X9/ECF200
7695	4.70	8380	Call	C1J-A	See C1K/6014	E80T	11.40	ECF201	See 6U9/ECF201
7698	25.50	8393	15.30	C1K/6014	109.80	E81L	See 6686/E81L	ECF801	See 6GJ7/ECF801
7699	20.40	8416	15.30	C3J/5632	Call	E82CC	See 6189/12AU7WA	ECF802	See 6JW8/ECF802
7703	Call	8417	58.90	C3JA/5684	Call	E83F	See 6689/E83F	ECF804	6.60
7710/Z70U	31.90	8421	See 5092/8421	C6J/5C21	45.90	E86C	12.70	ECH3	12.50
7711	12.70	8422/5991	32.60	C6J-F	Call	E88C	See 8255/E88C	ECH21	10.00
7716	4.60	8423	25.50	C6J-K/5685	95.60	E88CC	See 6922/E88CC	ECH42	See 6CU7/ECH42
7717	4.20	8426	5.10	C6J-KF	95.60	E90CC	See 5920/E90CC	ECH80	See 6AN7A/ECH80
7722/E280F	18.40	8445	3.10	CAA-322	42.50	E90F	See 6BH6/E90F	ECH81	See 6AJ8/ECH81
7723	See 610/7723	8458/YL1240	44.10	CE-1C	See 918/CE-1C	E91H	See 6687/E91H	ECH83	See 6DS8/ECH83
7723NE	Call	8462	Call	CE-201A	Call	E92CC	10.60	ECH84	See 6JX8/ECH84
7724	5.40	8463	20.40	CE1VC/PJ22	Call	E99F	See 6BJ6/E99F	ECH200	See 6V9
7734	See 6GE8/7734	8502	12.70	CE2C	23.40	E130L	See 7534/E130L	ECL82	See 6BM8/ECL82
7735A	Call	8505A	Call	CE25C	See 927/CE25C-D	E130LF	See 7543/E130LF	ECL84	See 6DX8/ECL84
7735B	Call	8509	Call	CE25D	See 927/CE25C-D	E180CC	See 7062/E180CC	ECL85	See 6GV8/ECL85
7738	10.20	8532	6.40	CE881	See 7043/CE881	E180F	See 6688/E180F	ECL86	See 6GW8/ECL86
7739	Call	8552	See 6883B/8552	CK1114	6.40	E182CC	See 7119/E182CC	ECL113	11.00
7751/E235L	37.80	8560A	Call	CK1121	19.20	E186F	See 7737	ECL805	10.20
7768	114.60	8560AS	Call	CT854	12.90	E235L	See 7751/E235L	ECL800	See 6KH8/ECL800
7788/E810F	36.10	8562	See 8255/E88C	CV5	See AH221/CV5	E280F	See 7722/E280F	ED500	See 6ED4/ED500
7801	350.00	8577	28.10	CV136	See 6AM5/EL91	E288CC	See 8223/E288CC	EF36	See 6J7/EF36
7854	Call	8595	44.60	CV1501-TT-11	11.80	E810F	See 7788/E810F	EF37A	Call
7867	Call	8596	66.30	CV2225	See 150B2	E1148	3.90	EF40	6.40
7868	Call	8608	30.60	CV2486	21.20	EA52	See 6923/EA52	EF43	14.10
7894	Call	8624	Call	CV4055/6132	6.40	EA53	96.90	EF50	3.90
7895	12.90	8627	29.30	CV5331	See 6ES8/ECC189	EA76	See 6489/EA76	EF80	See 6BX6/EF80
7898	8.60	8643	139.30	D5TF30	See 50A1/D5TF30	EA91	See 6AL5/6EB5	EF83	See 6BK8/EF83
7902	See 734L	8683	Call	DA2120	17.50	EABC80	See 6AK8/EABC80	EF85	See 6BY7/EF85
7905	15.30	8727	Call	DAC32	11.80	EAF42	See 6CT7/EAF42	EF86	See 6267/EF86
7983	35.60	8753	Call	DAF40	9.40	EAF801	9.70	EF89	See 6DA6/EF89

EF91	See 6AM6/EF91	EY91	5.40	KX55CG (ballast)	14.95	PL81	See 21A6	UF89	See 12DA6/UF89
EF92	See 6CQ6/EF92	EY802	5.90	KY21A	Call	PL83	See 15A6/PL83	UL41	See 45A5/UL41
EF93	See 6BA6/EF93	EZ2/3	11.80	L49D (ballast)	14.95	PL84	See 15CW5/PL84	UL84	See 45B5/UL84
EF94	See 6AU6A/EF94	EZ35	See 6X5GT/EZ35	LCF200	See 5X9/LCF200	PL95	11.80	UM80	17.70
EF95	See 6AK5/EF95	EZ40	See 6BT4/EZ40	LCF201	See 5U9/LCF201	PL500	See 27GB5/PL500	UM81	17.70
EF96	See 6AG5	EZ41	7.10	LCF801	See 5GJ7/LCF801	PL508	See 17KW6/PL508	UM85	35.40
EF97	See 6ES6/6FD6	EZ80	See 6V4/EZ80	LCF802	See 6LX8/LCF802	PL519	See 40KG6A/PL519	UY41	See 31A3/UY41
EF98	See 6ET6/EF98	EZ81	See 6CA4/EZ81	LCL84	See 10DX8/LCL84	PL5557/PL17	See 5557/FG-17	UY82	11.80
EF183	See 6EH7/EF183	EZ90	See 6X4/EZ90	LCL85	See 10GV8/LCL85	PM84	11.80	UY85	See 38A3/UY85
EF184	See 6EJ7/EF184	FG-17	See 5557/FG-17	LF183	See 4EH7/LF183	PY80	See 19X3	UY92	11.80
EF804	53.10	FG-27A	65.80	LF184	See 4EJ7/LF184	PY88	See 30AE3/PY88	V199	95.60
EF804S	68.50	FG-32	See 5558/FG-32	LFL200	See 11Y9/LFL200	QK209	See 5721/QK209	V201A	Call
EF805S	8.90	FG-57	See 5559/FG-57	LL86	See 10CW5/LL86	QQE03-12	See 6360-A	VGT128	12.80
EFL200	See 6Y9/EFL200	FG-81A	89.20	LY88	See 20AQ3/LY88	QQE04-5	See 7377/QQE04-5	VP41	11.80
EFP60	12.30	FG-95	See 5560/FG-95	M-2057	135.00	R145	11.80	VR53	7.10
EH90	See 6CS6/EH90	FG-104	See 5561/FG-104	M8082	11.80	R1130B	See 1B59/R1130B	VR65A	6.10
EK90	See 6BE6/EK90	FG-105	Call	M8083	5.70	R1169	Call	VR75	See 0A3/VR75
EL1C	See 3B22/EL1C	FG-178-A	20.40	M8096	See 6062/M8096	REL-64	10.00	VR90	See 0B3/VR90
EL2	Call	FM1000	7.50	MC1400	9.00	RK60	See 1641/RK60	VR105	See 0C3-A/VR105
EL3C	See 4B24/EL3C	G50/1G	12.80	MHLD6/VR101	6.60	RK61	13.70	VR135	11.80
EL3C-L	51.00	G180-2M	Call	ML381	See 2C39B/6897	RX21A	Call	VR150	See 0D3-A/VR150
EL6B	Call	GL415	See 5550/GL415	N142	See 45B5/UL84	RX233A	See 2C33/RX233A	VU111S	11.80
EL6C	63.70	GS10C	68.20	NL809	30.60	SC968B	See 5987/SC968B	VX64	8.20
EL16B	Call	GS10D	12.70	NL842/1917	46.00	SN4	See 631P1/SN4	W101	5.40
EL16F	Call	GV3A-1400	19.20	NL848	21.70	SP2	15.30	W142	See 12S7/UAF42
EL34	See 6CA7/EL34	GV3A-2500	19.20	NL5094	Call	SP41	10.70	WD-11	Call
EL34 (JJ)	11.20	GV3AB-1500	19.20	NL5440	21.90	STV85-10	7.10	X66/CV1099	4.60
EL34 (Svetlana "S" Logo)	18.95	GV5A-1600	19.20	NL5442A	11.40	SU2150A/VU120	5.70	X101	7.10
EL34 (Svetlana "C" Logo)	17.25	GV5A-2000	19.20	NL5866STX	14.10	SV83 (Svetlana "S" Logo)	4.95	X199	66.20
EL34B-STR (Ruby)	20.55	GY501	11.80	NL5870	11.40	SV572-30 (Svet "S" Logo)	58.80	X201A/301A	41.60
EL34 (EH)	12.95	GY802	5.90	NL5870S	14.10	T-40	59.50	201A-RG	22.50
EL34WXT (Sovtek)	12.95	GZ34	See 5AR4/GZ34	NL5971	Call	TB35/3D23	Call	(replacement for X201A/X301A)	
EL37	Call	GZ37	63.70	NL5992	11.40	TD03-10/DET2	Call	XCF80	See 4BL8/XCF80
EL42	11.80	H63	See 6F5/H63	NS1	5.40	TD03-5	Call	XF183	See 3EH7/XF183
EL82	See 6DY5/EL82	HABC80	See 1978	OM4	See 6R7G/OM4	TJ801K-1 (ballast)	14.95	XF184	See 3EJ7/XF184
EL84	See 6BQ5/EL84	HBC90	See 12AT6/HBC90	ORP60	9.40	TJ880	12.30	XL86	See 8CW5-A/XL86
EL84-R (Ruby)	12.20	HCC85	See 17EW8/HCC85	ORP90	9.40	TYPE 21 (ballast)	14.95	XL500	See 13GB5/XL500
EL86	See 6CW5/EL86	HCH81	See 12AJ7/HCH81	P-B57 (ballast)	14.95	TYPE A (ballast)	14.95	XXB	See 3C6/XXB
EL90	See 6AQ5A/6HG5	HCH81/12AJ8	11.80	PABC80	See 9AK8/PABC80	TZ-40	Call	XXD	See 14AF7/XXD
EL91	See 6AM5/EL91	HF93	See 12BA6/HF93	PC88	See 4DL4	U37	See 1T2/U37	XXFM	See 7X7/XXFM
EL95	See 6DL5/EL95	HK-24	See 25T/HK-24	PC95	See 4GK5	U50	See 6004/U50	XXL	See 7A4/XXL
EL156	Call	HK90	See 12BE6/HK90	PC96	9.40	U329	See 25BR3/U329	XY88	See 16AQ3/XY88
EL183	11.80	HL23/VR130	6.10	PC900	See 4HA5/4HM5	U709	Call	Y-1938	19.20
EL500	See 6GB5-A/EL500	HP-45B	Call	PCC84	See 7AN7/PCC84	UABC80	4.60	Y278	Call
EL508	23.60	HY69	Call	PCC85	See 9AQ8/PCC85	UAF42	See 12S7/UAF42	Y561	Call
EL509	See 6KG6A/EL509	HY75	19.20	PCC88	See 7DJ8/PCC88	UBC41	See 14L7/UBC41	YC95	See 3ER5/YC95
EL509 (Svetlana "S" Logo)	29.95	HY615	12.90	PCC89	See 7EK7/7FC7	UBC81	See 14G6/UBC81	YL1080	12.70
EL802	17.70	HY1269	5.10	PCC189	See 7ES8	UBF80	See 17C8/UBF80	YL1240	See 8458/YL1240
EL803	5.40	K42C (ballast)	14.95	PCF80	See 8A8/9A8/9U8	UBF89	See 19FL8/UBF89	Z70U	See 7710/Z70U
EL803S	11.80	K49C (ballast)	14.95	PCF82	See 8A8/9A8/9U8	UBL21	7.40	Z803U	See 6779/Z803U
EL805	8.10	K55D (ballast)	14.95	PCF86	See 8HG8/PCF86	UCC84	5.40	Z900T	See 5823/Z900T
EL822	12.30	55H (ballast)	14.95	PCF200	See 8X9	UCC85	See 26AQ8/UCC85	ZM1000	32.60
ELL80	See 6HU8/ELL80	K67B (ballast)	14.95	PCF201	See 8U9	UCF12	47.20	ZM1001	49.60
EM34	See 6CD7/EM34	KL25H (ballast)	14.95	PCF800-30C15	11.80	UCF80	See 27BL8/UCF80	ZM1030	Call
EM80	See 6BR5/EM80	KL50S2 (ballast)	14.95	PCF801	See 8GJ7/PCF801	UCH4	11.80	ZP1400	11.80
EM81	See 6DA5/EM81	KL50S3 (ballast)	14.95	PCF802	See 9JW8/PCF802	UCH21	5.20	ZZ1000	See 8228/ZZ1000
EM84	See 6FG6/EM84	KL75 (ballast)	14.95	PCF806	See 8GJ7/PCF801	UCH42	See 14K7/UCH42		
EM85	See 6DG7	KL75H (ballast)	14.95	PCF808	5.90	UCH81	See 19D8/UCH81		
EM87	See 6HU6/EM87	KL45 (ballast)	14.95	PCH200	See 9V9/PCL200	UCL81	11.80		
EM1188C	Call	KT66 (Genelex)	Call	PCL81	10.20	UCL82	See 50BM8/UCL82		
EMM801	Call	KT66 (Valve Art)	29.70	PCL82	See 16A8/PCL82	UCL83	3.10		
EY80	See 6U3/EY80	KT88 (China)	27.90	PCL84	See 15DQ8/PCL84	UF14	Call		
EY82	See 6U3/EY80	KT88 (GEC)	Call	PCL800-30PL13	11.80	UF41	See 12AC5/UF41		
EY82_6N3	See 6U3/EY80	KT88 (Sovtek)	39.95	PD500	See 9ED4/PD500	UF42	11.80		
EY84	See 6374/EY84	KT88 Blue Glass (JJ)	48.90	PFL200	See 16Y9	UF43	11.80		
EY86	See 6S2-A/EY87	KT88 (JJ)	41.90	PJ22	See CE1VC/PJ22	UF80	3.10		
EY87	See 6S2-A/EY87	KT88 (Svetlana "C" Logo)	56.80	PJ23	See 868/PJ23	UF85	See 19BY7/UF85		
EY88	See 6AL3/EY88	KTW61	8.20	PL21	See 2D21/PL21	UF86	28.40		

fax: 480.820.4643 OR 800.706.6789 (us & canada only)

14 used Tubes, Vibrators, Schematic Service, Tube Boxes and Bases

Used Tubes

01A (ST)	21.20	6LX6	20.50	75 (ST)	7.80	300B (WE)	Call	6550-A (US)	23.80
2A3	35.70	6MJ6	34.70	76 (ST)	7.40	310A-B (WE)	Call	6550 ST (US)	Call
2A3 (single plate)	Call	6N6G	15.20	80 (ST)	11.40	311A-B	12.70	7027-A	27.60
5AR4/GZ34	Call	6V6GT	6.40	81 (ST)	8.20	350B	Call	7591A	42.00
5AS4A/5U4GB	8.10	10 (ST)	Call	83	12.70	350B (WE)	Call	8005	82.80
5R4GY/A/B	6.40	10Y (ST)	44.70	112A	30.00	421A (WE)	Call	8068	32.40
5U4G/5AS4	12.20	12A (ST)	Call	171-A	38.20	485	12.90	8560AS	Call
5V4G	6.70	12AX7-A(US)	6.95	210	Call	710/6011	Call	8908	Call
5V4GA	5.50	12AX7 (Tele smooth plate)	Call	211/VT-4C	95.00	715A-B-C	17.50	8950	Call
5Y3G	7.70	20LF6	33.70	224	7.70	801-A	Call	C3J-5632	26.00
6A7	5.70	21JS6A/23JS6	11.80	226	12.00	805	Call	KT66 (Genelex)	Call
6F6G	11.70	24A (ST)	6.00	227	12.20	807	7.90	KT88 (British)	116.80
6HF5	7.10	25L6G	4.50	232	12.90	810	61.10	KT88 (GEC)	143.80
6J5G	10.10	26 (ST)	9.10	235/251	5.40	813	23.00	UXCV11	Call
6JB6A	13.40	27 (ST)	5.00	237	25.10	814	12.70	V199	46.70
6JE6C/6LQ6	25.50	30	8.20	239/244	5.80	830B	Call	V201A	Call
6JS6C	24.80	41 (ST)	5.80	240	Call	872-A	30.60	WD-11	Call
6KD6	20.80	42 (globe)	Call	245	80.40	950 (ST)	9.70	WX-12	Call
6L6G	19.20	42 (ST)	10.30	246	38.20	5691 (red base)	28.10	X199	37.10
6L6GC (RCA black plate)	Call	45 (ST)	33.10	247	Call	5692 (black/brown base)	21.70	X201A/301A	21.90
6L6GC	15.30	46 (ST)	12.70	250	221.10	5692 (red base)	36.40	201A-RG New!	22.50
6LB6	14.10	47 (ST)	9.00	256	19.50	5932/6L6WGB	15.90	(Replacement for X201A/X301A)	
6LF6/6MH6	38.20	50 (ST)	158.60	280	47.20	6087/5Y3WG7B	6.70		
6LR6	20.70	71A (ST)	20.70	281	30.60	6146-A-B	12.60		



Solid State Vibrator Replacements

New manufacture solid-state replacements for 6V and 12V 3 and 4 pin vibrators. 1 1/2" diameter x 2 3/4" high aluminum can. Replace your buffer capacitor when you replace your vibrator!

Description	Part #	Price
6V, 4 pin, negative ground	P-V1015N	\$29.95
6V, 4 pin, positive ground	P-V1015P	29.95
12V, 4 pin, negative ground	P-V2015N	29.95
12V, 4 pin, positive ground	P-V2015P	29.95
12V, 3 pin, negative ground	P-V2215N	29.95

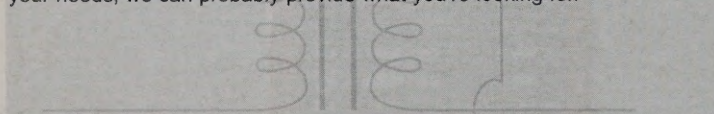
Tube Boxes

Heavy plain white boxes with dividers to cushion tube. Save 15% by purchasing 100 of any one type, save even more by the case. Minimum order of 10 per size.

Box Size	lbs/100	each	Per 100	Part #	Case Quantity	Price
1" x 1" x 3" (min)	1.0	\$0.15	\$12.75	S-B247	1500	\$168.75
1" x 1" x 3 1/4" (min)	1.0	.20	17.00	S-B254	1500	225.00
1 1/4" x 1 1/4" x 3 11/16"	1.5	.22	18.70	S-B248	750	126.75
1 5/8" x 1 5/8" x 4 15/16"	3.0	.28	23.80	S-B249	650	136.50
1 7/8" x 1 7/8" x 5 3/8"	4.0	.30	25.50	S-B251	800	180.00
2 1/4" x 2 1/4" x 6 1/8"	5.5	.33	28.05	S-B252	500	123.75
3" x 3" x 7"	7.0	.42	35.70	S-B253	300	94.50

Schematic Service

We maintain a huge library of service information for early radios, TVs and other early tube gear. Copies of early radio schematics for known makes & models are available for \$7.50. TV schematics or radio schematics where make or model is unknown are available for \$12.50. Contact us with your needs, we can probably provide what you're looking for.



Tube Bases



Sold by the dozen.

Description	Part #	Price
Four Pin	G-122	\$13.45
Five and Six Pin	G-123	13.45

Heavy Plain Tube Boxes

No divider for larger industrial and transmitting tubes. Sold individually.

Description	Part #	Price
3" x 3" x 10"	S-B120	\$0.65
3" x 3" x 5"	S-B121	.55
4" x 4" x 4"	S-B122	.60

Tube Egg Crate

15" x 15" egg crate packing boxes designed for storing tubes. Supplied unassembled.

Description	Cells/Size	Part #	Price
7 and 9 miniature	289 - 7/8" x 1 3/4" high	S-B123	\$7.36
GT, Metal	121 - 1 5/16" x 2 3/4" high	S-B124	8.65
Small ST	81 - 1 1/2" x 3" high	S-B125	8.25
Large ST	64 - 1 3/16" x 3 3/4" high	S-B126	6.75

Cartons for above

15" x 15" x 4"	S-B127	4.50
15" x 15" x 5"	S-B128	4.50

"Type S" Socket Adapter Plate

When the hole in the chassis is too large to mount a Type S sockets directly to the chassis with a wavy washer, this adapter can be used. $1\frac{3}{16}$ " diameter opening in plate, $1\frac{1}{2}$ " to about $1\frac{7}{8}$ " mounting centers can be used.



Socket is secured to plate with wavy socket washer.

Mounting plate	P-SH12-1-31	\$1.50
Wavy washer	P-SH2-104-2	.50

Tube Shields

bayonet style with spring



7 pin, $1\frac{3}{8}$ " tall, steel, NOS	P-SS7-157	\$1.10
7 pin, $1\frac{3}{4}$ " tall, steel, NOS	P-SS7-158	1.10
7 pin, $2\frac{1}{4}$ " tall, steel, NOS	P-SS7-194	1.25
7 pin, $1\frac{7}{8}$ " tall w/base, alum, China	P-SS7-160	1.60
9 pin, $1\frac{1}{2}$ " tall, steel, NOS (Eby)	P-SS9-161	2.25
9 pin, $1\frac{1}{2}$ " tall w/base, steel, China	P-SS9-162	1.95
9 pin, $1\frac{7}{8}$ " tall w/base, steel, China	P-SS9-163	3.95
9 pin, $1\frac{7}{8}$ " tall w/base, steel, Elco NOS	P-SS9-166	4.95
9 pin, $1\frac{7}{8}$ " tall w/base, alum, China	P-SS9-325	2.25



other type (nos) (while supplies last!)

7 pin, $1\frac{3}{8}$ " tall, push-on	P-SS7-173	\$0.95
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9 pin $1\frac{7}{8}$ " tall, bayonet style with spring, interior is ribbed to dissipate heat. Flexible metal strip to provide contact between shield and base is included. Very high quality Collins.

P-SS9-165	\$5.95
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Millen Ceramic Octal Socket

Military grade octal socket. Ceramic skirt for long leakage path to chassis, 5,700 VDC rating. Silver plated phosphor bronze contacts. With nickel plated steel mounting saddle.

$1\frac{1}{8}$ " hole

P-ST8-33008	\$24.95
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Grid/Plate Caps

Ceramic	$\frac{1}{4}$ " (6K7)	P-SG116	\$6.50
Plastic w/lead	$\frac{23}{64}$ " (807)	P-SG118	6.25
Ceramic	$\frac{3}{8}$ " (807)	P-SG110	2.50
Ceramic	$\frac{7}{16}$ " (807)	P-SG111	2.75
Ceramic	$\frac{9}{16}$ " (811, 572B)	P-SG115	2.95

Tube Retainers

For use with guitar amps and applications where EL34/5881 is suspended upside down in chassis.

S-H141	\$2.95
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For use with guitar amps and applications where KT88 is suspended upside down in chassis.

S-H143	\$2.95
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Octal Tube Clip

Grips tube base with "teeth" to securely hold tube in place. For use with octal sockets with $1\frac{1}{2}$ " mounting centers. **Sold individually.**

S-H142	\$1.75
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Octal Keyway Replacement

Do you have valuable octal type tubes that work fine except the keyway has been broken off the base? Fix it with this simple and inexpensive product. Simply clean the remainder of the broken keyway from the base and slip one of these on. Will stay on by itself, or you can use a dab of silicon to attach if you wish. **Package of 4** keyway replacements.



P-STKY-1	\$8.00
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Octal Relay Socket

Great for experimenting! Use anywhere you would use a normal octal tube socket, but use screw terminal strips to attach wiring. No need to mount socket and solder leads.

P-ST8-108S	\$9.95
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Tuning Eye Adapter

6 pin plug-in adapter allows hard to find 6U5 or similar tuning eye tubes to be replaced with 1629 tubes.

P-SA314	\$17.50
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7591 Tube Adapter

Replace expensive and hard to find 7591 tubes with less expensive 6GM5 tubes.

P-SA317	\$14.95
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WD11 Tube Adapter

Replaces hard to find WD11 tube with less expensive 3D6/1299 tube.

P-SA315	\$29.95
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Octal Tube Base

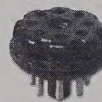
Used for octal plug or coil form $1\frac{1}{4}$ " dia. x $\frac{13}{16}$ " high.

P-SP8-476	\$2.95
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4-Pin Tube Base

Used for 4-pin plug or coil form $1\frac{3}{8}$ " dia. x $1\frac{1}{16}$ " high.

P-SP4-477	\$2.95
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Multiwire 8 Contact Plug

Amphenol

P-SP8-CP8	\$0.95
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8 Pin Octal Plug

With screw on cover

P-SP8-K-026	\$1.95
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4 Pin Plug

With screw on cover

P-SP4-329-4	\$2.95
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fax: 480.820.4643 OR 800.706.6789 (us & canada only)

16 sockets

Listed are sockets we normally stock. Because most of our sockets are surplus and have been in storage for years, some types may show minor signs of corrosion and dirt buildup. All sockets are unused. We may run out of certain types. The figures show the general design and style of the socket type. Due to the many variations of sockets produced by different manufacturers over the years, sockets of the same part number may vary. If you have a specific requirement for your socket, please state this need on your order.



P-ST4-191



P-ST4-192
P-ST4-193
P-ST4-312



P-ST4-205M
P-ST4-205MX



P-ST5-216



P-ST5-181



P-ST5-473



P-ST6-207M



P-ST6-207MX



P-ST6-166



P-ST7-150
P-ST7-151
P-ST7-202



P-ST7-153



P-ST7-156
P-ST7-157



P-ST7-158



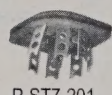
P-ST7-159



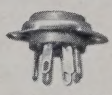
P-ST7-194



P-ST7-195



P-ST7-201



P-ST7-201MX



P-ST7-201MXB



P-ST7-202



P-ST7-204



P-ST7-205



P-ST7-205L



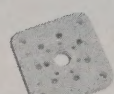
P-ST7-218



P-ST7-307



P-ST7-309



P-ST7-310



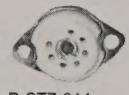
P-ST7-311



P-ST7-474



P-ST7-813



P-ST7-814



P-ST7-815

Socket	Top Insulator Bot. Material	Mnt.	Mounting Centers (")	Chassis Hole Dia. (")	Notes	Part #	Price
4 pin - 300B/811 sizes							
bayonet	C	t	2			P-ST4-312	\$4.50
plate	C	b	1 ¹³ / ₁₆		10	P-ST4-191	4.50
saddle - mip NOS	P	t,b	1 ¹ / ₂	1 ³ / ₁₆		P-ST4-205M	5.95
saddle - mip NOS	M	t,b	1 ¹ / ₂	1 ³ / ₁₆		P-ST4-205MX	4.95

4 pin - 211/845 size							
bayonet	C	t	2 ⁷ / ₈	-		P-ST4-192	\$7.95
bayonet	C	t	2 ⁷ / ₈	-	1	P-ST4-193	12.95

5 pin - 24/27 size							
plate	C	b	1 ¹³ / ₁₆			P-ST5-216	\$3.95
type S NOS	P	t,b		1 ³ / ₁₆	4	P-ST5-181	3.95

6 pin - 41/42 size							
plate NOS	C	b	1 ³ / ₁₆		10, 18	P-ST6-166	\$3.95
type S NOS	P	b,t		1 ³ / ₁₆		P-ST6-207MX	5.25
saddle - plate NOS	P	b	1 ¹ / ₂ to 1 ³ / ₄	1 ³ / ₁₆		P-ST6-207M	5.25

7 pin - 6A7 size							
plate - U.S. NOS	C	b	1 ¹³ / ₁₆		10	P-ST7-309	\$6.95
saddle - plate NOS	C	b	1 ¹³ / ₁₆	1 ³ / ₁₆		P-ST7-307	4.95

7 pin - 6C33CB size							
plate	C	b	1 ⁷ / ₈ x 1 ⁷ / ₈		10	P-ST7-310	\$4.25

7 pin - 813 size							
plate	C	b	1 ⁷ / ₈ x 1 ⁷ / ₈		10	P-ST7-813	\$4.25

7 pin - 1625 size							
plates	C	b	1 ¹³ / ₁₆		10	P-ST7-311	\$4.25

7 pin miniature - 12AJ6/12AU6 size							
saddle -plate NOS	C	t	7/ ₈	5/ ₈	3	P-ST7-204	\$2.95
saddle -plate NOS	M	t	7/ ₈	5/ ₈	3	P-ST7-201MX	.95
saddle -plate NOS	M	b	7/ ₈	5/ ₈	3	P-ST7-201MXB	.95
saddle -plate NOS	P	b	7/ ₈	5/ ₈	2, 3, 17	P-ST7-205	.50
saddle -plate NOS	P	b	7/ ₈	5/ ₈	16	P-ST7-205L	.95
saddle -separate plate NOS	C	t(b)	7/ ₈	5/ ₈	9,11	P-ST7-814	1.50
saddle -shield base NOS	P	t	7/ ₈	5/ ₈	15	P-ST7-150	2.95
saddle -shield base NOS	M	t	7/ ₈	5/ ₈		P-ST7-151	.75
saddle -shield base NOS	C	t	7/ ₈	5/ ₈		P-ST7-202	1.95
saddle-press shield base NOS	P or M	t	7/ ₈	5/ ₈		P-ST7-153	1.25
saddle -tele. shield NOS	M	t	1	3/ ₄		P-ST7-156	.50
saddle -tele. shield NOS	B	t	1	3/ ₄		P-ST7-157	.50
braise -tele. shield NOS	P	t	-	23/ ₃₂	8	P-ST7-158	.50
wafer NOS	P	b	1			P-ST7-201	1.00
pc-half shield, press tails NOS	P	t	-	.687 pin dia.	5	P-ST7-159	.25
pc -press tails NOS	P	t	-	3/ ₄ tail dia.	3,5	P-ST7-194	.25
pc -stand-off NOS	P	t	-	3/ ₄ tail dia.		P-ST7-195	.50
pc -snap in NOS	P	t	-			P-ST7-815	.25
pc NOS	P	t	-	.707 pin dia.		P-ST7-218	.45

Insulator Materials: C = ceramic

M = micalex

P = phenolic

Socket Notes

- 1) Gold Plated Contacts
- 2) Most have 4 tie lugs on saddle. If you specifically desire to have tie lugs on saddle, please specify this on your order.
- 3) Most have a center shield
- 4) Mounts to chassis with wavy washer or with adapter plate P-ST12-1-31 (sold separately), using the wavy washer to attach the socket to the adapter plate.
- 5) Press in contact tails provide Mechanical retention prior to soldering to PC board.
- 6) Socket rests on shoulder of contact tail, providing an air gap for cooling. For 1/4" circuit boards with bottom circuitry.
- 7) Mounting hardware not available.
- 8) As far as we can tell, these sockets are designed to be pressed into the chassis and braised. Buy a few and try!
- 9) Mounting ring provided allows socket to be mounted from the top or bottom of chassis.
- 10) Bossed mounting holes and recessed rivets allows sub-panel mounting

- 11) Separate mounting ring is designed for top mounting but could be used for bottom mounting in thin gauge chassis (<0.06" thick).
- 12) P-ST8-800 and P-ST8-801 are identical except for contact style. P-ST8-800 has a split circular contacts while P-ST8-801 has split straight contacts.
- 13) Top or bottom soldering
- 14) Bottom soldering only
- 15) Limited Supply
- 16) Solder lugs
- 17) No solder lugs
- 18) Wire wrap lugs
- 19) Keyed hole
- 20) Oval
- 21) Rectangular
- 22) Shield collar

Socket	Top Insulator Bot. Material	Mounting Mnt.	Chassis Centers (")	Hole Dia. (")	Notes	Part #	Price
8 pin - Octal Sizes							
molded NOS	P	t	-	1.062	7, 19	P-ST8-185	\$2.50
molded	P	t	1 1/2 to 1 1/2	1.0	9	P-ST8-325	5.95

8 pin octal - EL34/6SL7 size

mip	P	b	1 1/2	1 1/8		P-ST8-485	\$5.95
saddle - plate	C	b	1 1/2 to 1 13/16	1 5/16		P-ST8-33008	24.95
saddle - plate, nos	C	b	1 1/2	1 1/16		P-ST8-CIR-8	5.95
saddle - plate, black NOS	P	b	1 1/2	1 1/8		P-ST8-209M	3.95
saddle - mip	M	t,b	1 1/2	1 1/8		P-ST8-209MIP	5.95
saddle - ring mount	C	t,b	1 7/16	1 1/16 to 1 1/4	9, 12	P-ST8-800	2.75
saddle - ring mount	C	t,b	1 7/16	1 1/16 to 1 1/8	9, 12	P-ST8-801	2.75
saddle - ring mount	C	t,b	1 7/16	1 1/16 to 1 1/4	9, 12	P-ST8-802	8.95
saddle - plate, black	P	b	1 1/2	1 1/8		P-ST8-483	4.95
saddle NOS	P	b	1 1/4	1		P-ST8-808	3.95
type S NOS	P	t		1 3/16	4	P-ST8-311	3.95
all molded NOS	P	b	1 3/8	1 1/16		P-ST8-482	.95
wafer NOS	P	b	1 1/2		20	P-ST8-127	2.25
wafer NOS	P	b	1 1/2		21	P-ST8-128	1.25
wafer NOS	P	b	1 5/16			P-ST8-209W	.75
pc - stand-off	C	t	1	1 tail dia.	6	P-ST8-193	2.95
pc - mount NOS	P	b		1 1/16 tail dia.		P-ST8-815	2.95

9 pin magnoval - EL509/6KG6A size

all molded NOS	C	t,b	1 7/16 - 1 9/16	7/8 t, 1 1/4 b		P-ST9-509	\$5.25
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9 pin miniature - 12AX7/12BH7 size

saddle - mip	P	b	1 1/8	3/4		P-ST9-100	\$4.95
saddle - plate NOS	P	b	1 1/8	3/4	15, 17	P-ST9-211M	4.95
saddle - shield base	P	t	1 1/8	3/4		P-ST9-213	3.50
saddle - shield base NOS	M	t	1 1/8	3/4		P-ST9-213MX	5.95
saddle - shock mount NOS	M	b	1 1/4	3/4		P-ST9-137R	2.25
saddle	C	t,b	1 1/8	7/8	9, 11	P-ST9-511	2.50
wafer NOS	P	b	1 5/16		21	P-ST9-149	.75
wafer NOS	P	b	1 1/8		20	P-ST9-150	.75
pc - stand-off, white	C	t	-	13/16 tail dia.	6	P-ST9-214	2.50
pc - stand-off, white	P	t	-	3/4 tail dia.	6	P-ST9-215	3.25
pc - stand-off NOS	P	t	-	9/16 tail dia.	6	P-ST9-215B	3.25
pc mount - split tail NOS	P	t	-	.781 tail dia.		P-ST9-218	.95
pc mount wafer-split tail NOS	P	t	-	.781 tail dia.		P-ST9-217	.95
pc - snap in NOS	M	t			13	P-ST9-521	.50
pc - snap in NOS	P	t			14	P-ST9-520	.50
pc - snap in NOS	M	t			13	P-ST9-522	.50
braise - tele. shield NOS	M	t	-	3/4	8	P-ST9-161	.50

9 pin compactron - 6KV6/6JE6 size

saddle - plate NOS	P	b	1 5/16	1		P-ST9-254M	\$3.95
pc - stand-off NOS	P	t		15/16 tail dia.	6	P-ST9-215-1	1.25
pc NOS	M	b	1	5/16 tail dia.	6	P-ST9-215-2	2.25

12 pin compactron - 6LF6/20LF6 size

saddle NOS	M	b	1 5/16	1		P-ST12-295M	\$4.95
all molded, black NOS	P	t,b	1 5/16	1 1/16	6	P-ST12-296M	3.95
pc - stand-off, black NOS	P	t	-	1 1/16 tail dia.	6	P-ST12-114	1.95
pc - press tails NOS	P	t	-	1.063 tail dia.	5	P-ST12-176	.95

Novistor Sockets

pc, 5 pin NOS	M	t	1/2" tabs	-		P-STN-472	\$1.95
ring type, 5 pin NOS	M	t	-	-	7	P-ST5-473	4.95
ring type, 7 pin NOS	P	t	-	-	7, 22	P-ST7-474	3.95

Crystal Holder Sockets

Red plastic, for crystal holders having 1/2" centers. Easily mounted. May be used as dual tip jacks on test panels. Package of 4

P-SX-125

\$1.00

**Transistor Sockets**

3 lead, in-line
4 lead, in-line

P-STR-001

\$1.25

P-STR-002

.95



P-ST8-127

P-ST8-128
P-ST8-209W

P-ST8-185



P-ST8-193



P-ST8-209M



P-ST8-209MIP



P-ST8-311



P-ST8-325



P-ST8-33008



P-ST8-482



P-ST8-483



P-ST8-485



P-ST8-800



P-ST8-802



P-ST8-801



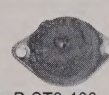
P-ST8-808



P-ST8-815



P-ST8-CIR-8



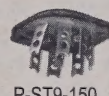
P-ST9-100



P-ST9-137R



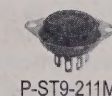
P-ST9-149



P-ST9-150



P-ST9-161



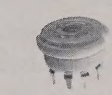
P-ST9-211M



P-ST9-213



P-ST9-213MX



P-ST9-214



P-ST9-215



P-ST9-215-1



P-ST9-215-2



P-ST9-217



P-ST9-218



P-ST9-254M



P-ST9-509



P-ST9-511



P-ST9-520



P-ST9-521



P-ST9-522



P-ST12-114



P-ST12-176



P-ST12-295M



P-ST12-296M



P-STN-472

fax: 480.820.4643 OR 800.706.6789 (us & canada only)

Single Ended Output & Power Transformers

All Designs by John Atwood

For complete specifications, please visit www.one-electron.com/trans.html

P-TUBT-1

The UBT-1 is a low-impedance single-ended transformer intended for parallel combinations of tubes running at B+ voltages for 250 to 325 volts, such as: two or three EL34s (triode-connected), three 2A3s, two 300Bs, two 6AS7s etc., as well as single sweep tubes run in "enhanced-triode" mode, resulting in 10 to 15 watts of output power. The UBT-1's low impedance gives an exceptionally broad frequency range of 10Hz to over 75KHz (at 1 watt). This transformer has been the basis for excellent-sounding single-ended amps, and is notable for it's clean, detailed sound. 6.1 lbs

\$89.95

P-TUBT-2

The UBT-2 is the same size and power (15 watts) as the UBT-1, but has a higher primary impedance suitable for single tubes running at B+ voltages of 400 to 500 volts, such as: 50, WE 300B, 572-3, etc. The trade-off of a higher impedance transformer is worse bandwidth, but additional interleaving was added in the UBT-2 to extend the frequency range from 10Hz to over 55KHz (at 1 watt). The UBT-2 has also been successfully used as a choke load for shunt-feed output stages. Plate supply voltages over 600 volts are not recommended. 6.1 lbs

\$99.95

P-TUBT-3

The UBT-3 is the same size and power (15 watts) as the UBT-1 but has a primary impedance suitable for single or paralleled tubes running at B+ voltages of 300 to 400, such as: 2A3, WE 300B, 50 etc. The frequency response is from 10Hz to over 60KHz (at 1 watt). The 3K primary impedance offers lower distortion at only slightly less power in designs using the commonly-specified 2.5K transformers. 6.1 lbs

\$99.95

P-TBFT-1B

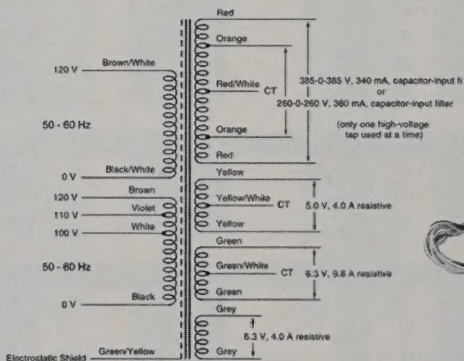
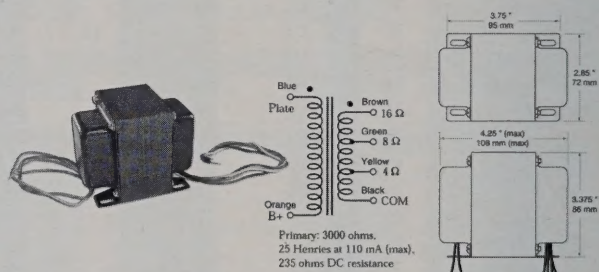
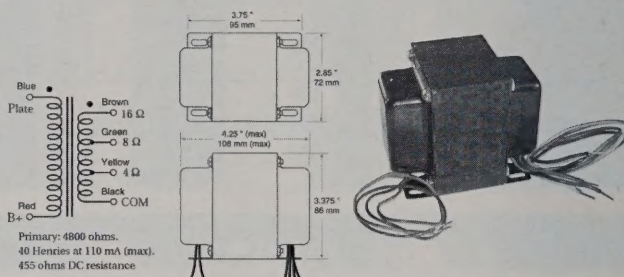
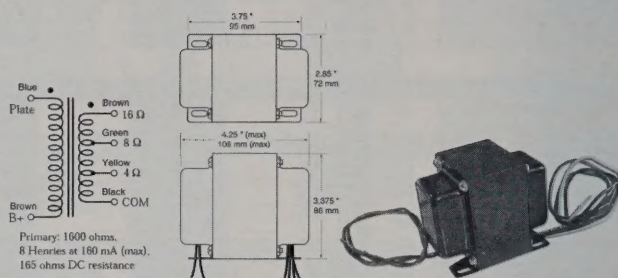
The BFT-1B was designed to power a stereo amplifier using UBT-1s in each channel but will also power an 80 watt push-pull tube amplifier. The BFT-1B is slightly larger than earlier versions of the BFT-1, allowing lower flux density and cooler operation. The tapped high-voltage windings and three filament windings provide flexibility in design. An electrostatic shield between the primaries and secondaries reduces power-line noise coupling. The primary arrangements allows use on virtually any power grid in the world. Overall dimensions: 4.5" x 3.75" x 5.875" (11.4 x 9.5 x 14.9 cm) 16 lbs

\$149.00

PRC-1 & PRC-2

The PRC-1 and PRC-2 audio chokes were designed for shunt-feed single-ended output applications, but are also useful where quality inductive loads are needed or as high-quality filter chokes. They have the same overall dimensions and use the same high-quality M6 laminations as the UBT transformers. Each have two identical windings, allowing series and parallel combinations:

Type	Connection	Inductance	DC Current	Resistance	Impedance
PRC-1	parallel	5.5H	230 mA	32	1K
	series	22H	115 mA	128	4K
PRC-2	parallel	12H	150 mA	76	2.3K
	series	48H	75 mA	304	9K



The table shows the maximum recommended load impedances when used as a shunt-feed choke. As with traditional class-A triode amplifiers, the driving impedance is about 1/2 the load impedance. The recommended load impedances are based on a -1dB response at 20Hz; for better low frequency response, use a choke with higher recommended load (higher inductance). 6.0 lbs.

P-RC-1 \$59.95

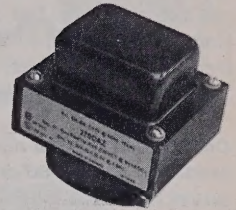
P-RC-2 59.95

Power Transformers

Replacements for 1930 to 1950 AC radios and tube type equipment. 117 Volt primary, 50/60 Hz. Provided with color-coded leads.

Part #	Mfg.	Rating			Mounting Centers	Weight	Price
P-T263AX	Hammond	100-0-100V	100MA	5V, 2A	2.5" x 1.57" vert.	1.5	\$34.15
P-T442	AES	125V	15MA	12.6V, .3A	2", U-bracket	0.7	16.95
P-T269AX	Hammond	125-0-125V	100MA	6.3V, 2A	1.56" x 1.5", vert.	1.7	33.45
P-T261M6*	Hammond	215V	269MA	6.3V, 4A	3" x 2.8125", vert.	4.0	56.12
P-T269JX	Hammond	250-0-250V	60MA	6.3V, 2.5A	1.56" x 1.75" vert.	1.8	34.43
P-T270CAX	Hammond	250-0-250V	70MA	5V, 2A 6.3VCT, 2.5A	2" x 2.0625", vert.	3.3	41.98
P-T270CBX	Hammond	250-0-250V	100MA	5V, 2A 6.3V, 3A	2" x 2.0625", vert.	3.5	63.00
P-T270DAX	Hammond	260-0-260V	90 MA	6.3V, 4A	2" x 2.125", vert.	3.7	40.50
P-T270DAZ	Hammond	260-0-260V	90 MA	6.3V, 4A	2.25" x 2.875", horiz.	3.5	41.40
P-T270BX	Hammond	275-0-275V	50MA	5V, 2A 6.3V, 2A	1.69" x 2", vert.	3.3	37.53
P-T270CX	Hammond	275-0-275V	65MA	6.3V, .6A 6.3V, 2.5A	1.69" x 2", vert.	2.4	40.60
P-T270DX	Hammond	275-0-275V	90MA	5V, 2A 6.3, 3A	1.94" x 2" vert.	3.3	42.05
P-T270FX	Hammond	275-0-275V	150MA	5V, 3A 6.3VCT, 5A	2.19" x 2.5", vert.	4.75	49.05
P-T270HX	Hammond	275-0-275V	200MA	5VCT, 3A 6.3VCT, 6A	2.69" x 2.5", vert.	5.9	62.37
P-T272BX	Hammond	300-0-300V	100MA	5V, 2A 6.3V, 3A	2.19" x 2", vert.	3.5	44.00
P-T272FX	Hammond	300-0-300V	150MA	5VCT, 3A 6.3VCT, 5A	2.19" x 2.5", vert.	5.0	56.42
P-T272JX	Hammond	300-0-300V	250MA	5VCT, 4A 6.3VCT, 8A	2.81" x 3", vert.	7.6	67.63
P-T273AZ	Hammond	325-0-325V	40MA	5V, 2A 6.3VCT, 2A	2" x 2", horiz.	5.8	45.66
P-T273CZ	Hammond	325-0-325V	150MA	5V, 3A 6.3VCT, 5A	2.5" x 2.5", vert.	5.8	70.94
P-T273DZ	Hammond	350-0-350V	90MA	5V, 2A 6.3VCT, 3A	2.25" x 2.8125", horiz.	4.9	58.58
P-T273BX	Hammond	350-0-350V	175 MA	5V, 3A 6.3VCT, 5A	2.69" x 2.5", vert.	6.1	58.22
P-T273DX	Hammond	350-0-350V	90MA	5V, 2A 6.3VCT, 3A	2.25" x 2.375", vert.	4.1	58.58
P-T274AX	Hammond	360-0-360V	120MA	5V, 3A 6.3VCT, 3.5A	2.5" x 2.44", vert.	5.4	54.00
P-T274BX	Hammond	375-0-375V	175MA	5VCT, 3A 6.3VCT, 6A	2.69" x 2.5", vert.	6.1	62.62
P-T278X	Hammond	400-0-400V	200MA	5VCT, 3A 6.3VCT, 6A	2.69" x 2.5", vert.	7.0	78.50
P-T278CX	Hammond	400-0-400V	465MA	6.3VCT, 6A	3.81" x 3", vert.	12.5	83.73
P-T279X	Hammond	425-0-425V	150MA	5VCT, 3A 6.3VCT, 5A	2.69" x 2.5", vert.	6.0	71.39
P-T282X	Hammond	500-0-500V	200MA	5VCT, 3A 6.3VCT, 6A	3.31" x 3", vert.	9.6	85.45

* For European radios

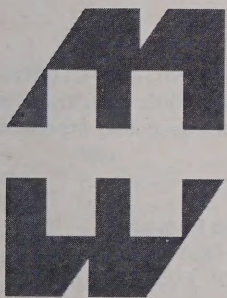


horizontal mount



vertical mount

NOTE: It is important that every receiver be carefully checked before a burned out transformer is replaced. Too often, some other defect, such as a defective tube, electrolytic condenser, or a partial circuit short has caused the original burnout and the replacement transformer is also ruined before the real cause is found and remedied!!!



HAMMOND MANUFACTURING™

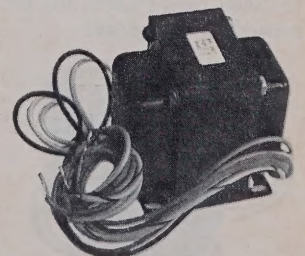
All *Hammond* Transformers & Chokes

Shown are Priced
10%
below
Hammond's
Retail Price!

Classic 300 Series Power Transformers

Picks up where the 200 series leaves off! High quality, high voltage! "World Power," with primary voltages of 100, 110, 120, 200, 220, 240 V @50/60 Hz. All have a secondary bias tap at 50 VAC. Concentric wound for low stray field and low noise. Hipot tested to 2500 VAC. Epoxy painted to match 1650 series output transformers. The P-T300BX is designed specifically for 300B's, the P-T302AX is designed specifically for 2A3's.

Part #	VA	Rating			Mounting Centers	Weight	Price
P-T369AX	40	125-0-125V	100MA	6.3VCT, 2A	1.6875" x 2" vert	2.6	\$49.09
P-T370BX	55	275-0-275V	50MA	5VCT, 2A 6.3VCT, 2A	1.9375" x 2" vert	3.1	55.22
P-T370FX	142	275-0-275V	150MA	5VCT, 3A 6.3VCT, 5A	2.94" x 2.5" vert	6.2	73.64
P-T363CX	119	180-0-180V	250MA	5VCT, 3A	2.4375" x 2.5" vert	5.6	73.63
P-T372BX	98	300-0-300V	100MA	5VCT, 2A 6.3VCT, 3A	2.1875" x 2.5" vert	4.8	65.05
P-T372FX	150	300-0-300V	150MA	5VCT, 3A 6.3VCT, 5A	2.5" x 2.9375" vert	6.2	83.45
P-T302AX	198	300-0-300V	200MA	2.5VCT, 2.5A 5VCT, 3A 6.3VCT, 6A	2.8125" x 3" vert	8.0	98.18
P-T372JX	243	300-0-300V	250MA	5VCT, 4A 6.3VCT, 8A	3" x 3.3125" vert	9.8	100.63
P-T374BX	200	375-0-375V	175MA	5VCT, 3A 6.3VCT, 6A	2.8125" x 3" vert	7.9	92.04
P-T378X	273	400-0-400V	200MA	5VCT, 3A 6.3VCT, 6A	3" x 3.0625" vert	8.9	116.60
P-T300BX	280	400-0-400V	250MA	5VCT, 1.2A 5VCT, 3A 6.3VCT, 6A	3" x 3.8125" vert	12.0	122.72
P-T378CX	465	400-0-400V	465MA	6.3VCT, 6A	3.5" x 3.5625" vert	17.6	125.18



fax: 480.820.4643 OR 800.706.678g (us & canada only)

Hammond Classic Tube Transformers

Hammond offers both single-ended and push-pull audiophile tube output transformers in their 1600 series. All specifications shown are at **full rated power**. All include multiple interleaved windings to maximize high frequency response and all (except for the 1650G) include Ultra-Linear taps at the 40% point. High grade laminations (M6) and high quality copper wire are used. The core is varnished and oven baked to ensure quiet operation, even at high ambient temperature. Hammond achieves a classic look to complement any amplifier design by finishing the end bells with a tough, low gloss, black powder paint finish to resist scratching. End bells include knockouts for optional above chassis wiring. From 3 to 280 watts, Hammond has the output transformer for you.

Don't see what you need? Give us a call and we'll get a Hammond Classic catalog out to you. We can special order any Hammond product. The full range of Hammond products can be found on Hammond's web site: www.hammondmfg.com.

1600 Series Push-Pull Transformers

Enclosed (shielded), 4 slot, above chassis Type "X" mounting. Frequency response 30 Hz to 30 kHz at full rated power (± 1 db max. ref. 1 kHz) minimum. All units have secondary impedance of 4/8/16 ohms. Flexible 8" leads.



The examples of possible combinations are to help you narrow down the choices of transformers for your favorite tube type. How you operate the tubes (push-pull, push-pull parallel, ultra-linear, etc.) will change the optimum plate to plate load impedance. A tube manual or technical data sheet should be consulted before choosing an output transformer.

Part #	Watts	Primary Imp. (ohms)	Mounting Centers(")	lbs.	Suggested Tube Types	Price
P-T1608	10	8,000 CT	1.69" x 2", vert.	2.5	6AQ5, 6V6, 6BQ5/EL84	\$36.82
P-T1609	10	10,000CT	1.69" x 2" vert.	2.5	6AQ5, 6V6, 6BQ5/EL84	36.82
P-T1615	15	5,000 CT	2.19" x 2", vert.	3.3	2A3, 6A3, 6AQ5, 6B4G, 6L6, 6V6	41.18
P-T1620	20	6,600 CT	2.44" x 2", vert.	3.5	6AQ5, 6L6, 6V6	42.22
P-T1650F	25	7,600CT	2.44" x 2", vert.	4.0	6L6GC, 6V6, 807, 5881, EL34	55.22
P-T1645*	30	5,000 CT	2.19" x 2.5", vert.	4.5	6L6GC, 6V6, 807, 5881, EL34	55.22
P-T1650G	35	6,600CT	2.5" x 2.25", vert.	4.7	6L6GC, 6V6, 807, 5881, EL34	60.14
P-T1650H	40	6,600 CT	2.69" x 2.5", vert.	6.5	6L6GC, 807, 5881, EL34	84.58
P-T1650K	50	3,400 CT	2.69" x 2.5", vert.	7.0	6L6GC, 807, 5881, EL34, 6146B, 6550	89.14
P-T1650N	60	4,300 CT	2.94" x 2.5", vert.	8.0	6L6GC, 807, 5881, EL34, 6146B, 6550, KT88	79.78
P-T1650P	60	6,600 CT	2.94" x 2.5", vert.	8.0	6L6GC, 807, 5881, EL34, 6146B, 6550	79.78
P-T1650R	100	5,000 CT	3.06" x 3", vert.	12.0	807, 5881, EL34, 6146B, 6550, KT88	82.85
P-T1650T	120	1,900 CT	3.31" x 3", vert.	14.0	6L6GC, 5881, EL34, 6550, KT88	96.28
P-T1650W	280	1,900 CT	5.88" x 3.5", vert.	28.0	6L6GC, 5881, EL34, 6550, KT88	184.10

*70V secondary winding in addition to the 4/8/16

1600 Series Single Ended Transformers

Enclosed (shielded), 4 slot, above chassis Type "X" mounting. Frequency response at least 20 Hz to 20 kHz at full rated power (± 1 db max. ref. 1kHz) minimum. All units have mount centers =3.81 x 3, and secondary impedance of 4/8/16 ohms. Flexible 8" leads. Each weighs 11 lbs.

Part #	Watts	Primary Imp. (ohms)	Max D.C. Bias	Suggested Triodes	Suggested Pentodes	Price
P-T1627SE	25	2,500	160ma	2A3, 6A3, 6B4G, 300B	6L6, 807, 5881, 6550, Parallel 6AQ5, 6V6, EL84, EL34	\$97.52
P-T1628SE	25	5,000	120ma	211, 300B	6AQ5, 6V6, 6L6, 807, 5881, 6550, EL84	97.52
P-T1629SE	25	6,500	100ma	811A, 572B, SV572-30		97.52
P-T1640SE	25	1,250	200ma	Parallel 2A3, 6A3, 6B4G, 300B	Parallel 6550, EL34	97.52

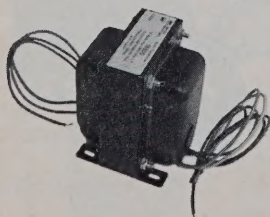
Rotary Impedance Selector - For Use With Hammond 1600 Series Transformers

Hammond 1600 series transformers all provide secondary impedances of 4, 8 or 16 ohms, but due to the unique wiring of the secondary, the impedance cannot be changed without rewiring... Until now. We now offer a selector switch, pre-wired and complete with 1/4" jack output. Follow simple instructions provided to wire transformer secondary to switch, mount switch and 1/4" jack in separate 3/8" diameter holes in chassis and you'll easily be able to select output impedance as needed.

P-H1600 \$14.95

Universal Single Ended Tube Output Transformers

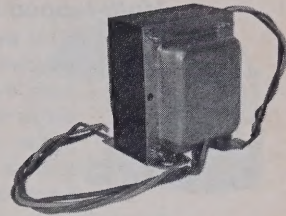
Part #	Audio Watts	Max. D.C. Bias (ma)	Wt.	Price
P-T125ASE	3	25	0.19	\$36.90
P-T125BSE	5	45	0.3	27.00
P-T125CSE	8	60	0.5	28.81
P-T125DSE	10	70	1.0	33.38
P-T125ESE	15	80	1.5	37.24



Output Transformer Replacements for Marshall™ Amplifiers

Built to vintage specs with exact interleave ratios and materials. Great for upgrading later issue Marshall™ amps. Gives great classic sound. Good replacement for JMP and JCM 800's. For EL34!

Part #	Specs	Price
P-TM050	50w	\$69.95
P-TM0100	100w	74.95



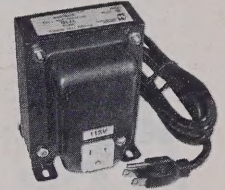
Line Isolation Transformers

Part #	Mfg.	VA Rating	Mounting Centers	lbs.	Price
P-TN-51X	Triad	35	3.125, U-bracket	2.0	\$20.95
P-T169SS	Hammond	90	2.19" x 2" vert.	4.5	36.82
P-T169VS	Hammond	175	2.69" x 2.5" vert.	7.0	42.96

115 volt primary, 60 Hz, 115 volt secondary, must be hard wired

P-T171A	Hammond	100	1.88" x 3"	6.5	61.44
P-T171B	Hammond	200	2.38" x 3"	8.1	74.30

115 volt primary, 50/60 Hz, 115 volt secondary, vertical mounting with single outlet receptacle on case. With line cord.



Audio Interstage Transformers

Part #	Description	Imp.-Ohms Pri. to Sec.	Mounting Centers	lbs.	Price
P-T124D	Push-Pull plate to push-pull grids (25 max DC bias)	7,000-15,800	2.375"	0.7	\$12.52
P-T156	Equivalent to Stancor A53-C. 1:3 ratio overall. Center tapped secondary may be Used for push-pull grids	10,000-90,000	2.0"	0.4	14.95
P-T431	Coil assembly only for above (P-T156). Use your own iron to preserve mechanical fit. Coil window is 1/2" x 1/2"			0.2	12.95
P-T124E	Multi-purpose, center-tapped primary. Center-tapped secondary providing 1:1.5/1:3/1:6 ratio	15,000-135,000	2.5"	0.8	25.15



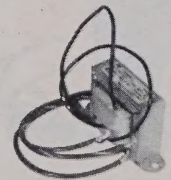
P-T431

Filament Transformers

115v Primary, 50/60 Hz. U-bracket mounting

Part #	Mfg.	Rating	Mounting Centers	lbs.	Price
P-T166M2	Hammond	2.5VCT, 3A	2.375"	0.8	\$10.90
P-T166Q2	Hammond	2.5VCT, 6A	2.8125"	1.0	16.24
P-T166S2	Hammond	2.5VCT, 10A	3.125"	1.8	17.68
P-T166L5	Hammond	5.0VCT, 2A	2.375"	0.7	14.65
P-T167R5*	Hammond	5.0VCT, 8A	1.44" x 1.75"	1.6	29.02
P-T166MS	Hammond	5.0VCT, 3A	2.8125"	1.3	10.90
P-T166RS	Hammond	5.0VCT, 8A	4.0"	2.2	18.18
P-T166L6	Hammond	6.3VCT, 2A	2.375"	0.8	14.63
P-T166N6	Hammond	6.3VCT, 4A	2.8125"	1.1	15.50
P-T166Q6	Hammond	6.3VCT, 6A	3.13"	1.4	23.80
P-T166S6	Hammond	6.3VCT, 10A	3.5625"	2.3	25.40
P-T167S10*	Hammond	10.0VCT, 10A	2.19" x 2.0"	3.2	32.26
P-T166N12	Hammond	12.6VCT, 4A	3.125"	0.8	19.07
P-T167L12*	Hammond	12.6VCT, 2.5A	1.75" x 1.5"	1.3	20.03

*Enclosed style 4 hole chassis mount

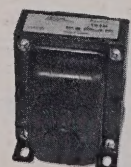


Special Power Transformers with 2.5v filament Windings (120v 60Hz Pri)

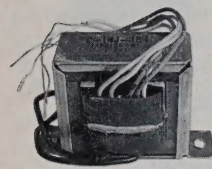
This transformer has been custom manufactured to provide the replacement needs for early 30's radios. It will work in most 6 and 7 tube sets. Supplied with vertical mounting shells, with the leads coming out one side so that horizontal mounting may be used (see note). Provides a separate filament winding for audio output stages but both 2.5V windings can be paralleled for the combined current rating. *Will provide 90MA if 5V winding is used with 2A rectifier.

Part #	Rating	Mounting Centers	lbs.	Price
P-T143	350-0-350v, 70-90ma* 5v, 3A 2.5V, 7.5A 2.5VCT, 3.5A	2.3125" x 2.5"	4.6	\$79.00

Note: Feet for vertical mounting can be cut off to enable horizontal mounting.



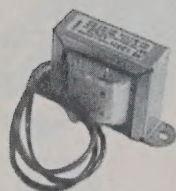
fax: 480.820.4643 OR 800.706.6789 (us & canada only)

Multi-tapped Power Transformer

60 V and 18.6 VCT secondaries. Many different voltages available, depending upon the connection you choose. Use two or more for even more flexibility and higher voltage, current or power. With suitable dropping devices, this transformer can power 6.3 or 12.6 tube filaments from the taps, in addition to supplying B+ using the whole secondary. Good for experimental circuits, power supplies, etc.

P-TC-141-354**\$9.95****Other Transformers**

Part #	Mfg.	Power	Primary	Secondary	Response	Centers	lbs.	Price
P-T31	AES	8W	5k ohm single-ended	8 ohm		2.375" u-bracket	0.7	\$12.95
P-TS142A	AES	15W	8k ohm CT push-pull	16/8/4 ohm	70-50,000	2" x 2.4375" vert	3.4	69.00
P-T125H	Hammond	8W	10k ohm	2/4/8 ohm		2.375" u-bracket	1.0	15.26
P-T125J	Hammond	8W	4k and 2500ohm	6/8/4 ohm		1.75"	0.3	17.27
P-TK15	Surplus	10mA	1.5k ohm	1.5k ohm CT	100-5k	PC mount	1 oz	.95
P-TK2	AES	8W	10k ohm	2500 ohm CT		1.75" u-bracket	4 oz	4.95
P-TTA-59	Stancor	5W	500 ohms push-pull	200 ohm CT	70-80k	1.75"	10 oz	5.95
P-TRS12-D45	Radio Shack	.45A	120VAC	12.6vct-450mA	Filament	2.0625"	12 oz	5.95
P-TK14	Surplus	5mA	interstage 2k ohm	100-100 ohm	200-5k	PC mount	3 oz	.95
P-T13	Surplus	5mA	interstage 15k ohm	60-60 ohm	200-5k	PC mount	3 oz	.95
P-TK17	Surplus	2W	Audio output 250 ohm	3.2 ohm	500-3k	.625" PC mount	2 oz	.50
P-T983	Surplus	3W	Audio output 2500 ohm	8 ohm	500-3k	1.5" u-frame	0.2	5.95



P-T125H



P-TRS12-D45

Hammond Transformer

Built in response to requests from the "Collins Collectors Association"

Isolation Unit: (i.e. separate primary and secondary)

Primary: 600 ohm (with 6" wire leads)

Secondary: 8 ohm with 4 ohm center tap (with solder lugs)

Power: Rated at 12 watts

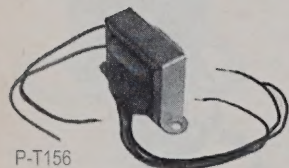
Frequency Response: 30 Hz-20kHz

Mounting: 1.3 lbs.

Weight: 2 hole U-bracket mount on 2.8125" mounting centers

P-T119DA**\$18.35****Filter Chokes**

Part #	Mfg.	Rating	Max. VDC	Resistance in ohms	Mounting Centers	lbs.	Price
P-T156R	Hammond	1.5 Henries 200mA	400	56	2.375" u-frame	0.7	\$10.20
P-T155H	Hammond	5 Henries 50mA	400	270	2" u-frame	0.4	10.23
P-T158Q	Hammond	5 Henries 150mA	400	105	2.8125" u-frame	1.3	16.73
P-T193H	Hammond	5 Henries 200mA	600	65	1.6875" x 2" vert	2.5	24.70
P-T193L	Hammond	5 Henries 300mA	800	57	2.4375" x 2.5" vert	5.5	30.58
P-T193P	Hammond	5 Henries 500mA	800	26	3" x 3.31"	10.75	71.64
P-T153E	Hammond	7 Henries 25mA	300	770	1.38" u-frame	1.0	19.77
P-T159Q	Hammond	7 Henries 150mA	500	100	3.56" u-frame	2.25	20.96
P-T193D	Hammond	8 Henries 150mA	600	75	2.5" x 2.1875" vert	3.3	29.80
P-T154G	Hammond	9 Henries 40mA	300	700	1.75" u-frame	0.25	8.84
P-T156G	Hammond	9 Henries 40mA	400	300	2.38" u-frame	0.5	9.90
P-T157J	Hammond	10 Henries 65mA	400	205	2.8125" u-frame	1.0	18.32
P-TC-7X	Triad	10 Henries 90mA	400	270	2.8125" u-frame	1.4	17.95
P-T158M	Hammond	10 Henries 100mA	400	195	2.8125" u-frame	1.3	16.52
P-T193G	Hammond	10 Henries 150mA	800	102	1.9375" x 2.5" vert	4.3	43.94
P-T193J	Hammond	10 Henries 200mA	800	82	2.4375" x 2.5" vert	5.5	41.13
P-T193M	Hammond	10 Henries 300mA	800	63	3" x 3.3125" vert	10.5	50.28
P-T193B	Hammond	12 Henries 100mA	600	155	1.6875" x 2" vert	2.5	24.68
P-T158L	Hammond	15 Henries 75mA	400	411	2.8125" u-frame	1.3	16.65
P-T159M	Hammond	15 Henries 100mA	500	256	3.56" u-frame	2.25	21.20
P-T154E	Hammond	20 Henries 20mA	300	1666	1.75" u-frame	0.25	9.26
P-T193C	Hammond	20 Henries 100mA	600	181	2" x 2.1875" vert	3.3	29.84
P-T157G	Hammond	30 Henries 40mA	400	595	2.180" u-frame	1.0	19.08
P-T155C	Hammond	60 Henries 8mA	400	2750	2" u-frame	0.3	9.90
P-T156C	Hammond	150 Henries 8mA	400	3700	2.38" u-frame	0.5	10.78



P-T156

R.F. Chokes from Hammond

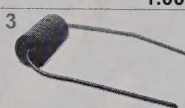
3 section windings on ferrite forms approximately 1 1/4" long by 5/8" over windings. With axial leads 1 1/2" long.

Part #	Inductance	Tolerance	Resistance	Max. DC Current	Price
P-C1535B	2.5mH	5%	9 ohms	160mA	\$3.40
P-C1535D	5.0mH	5%	14 ohms	160mA	3.55
P-C1535G	10.0mH	5%	31 ohms	100mA	3.88

NOS Chokes

While Supplies Last

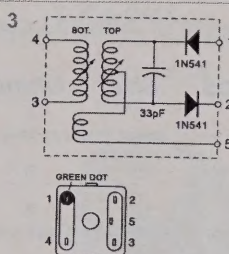
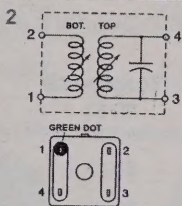
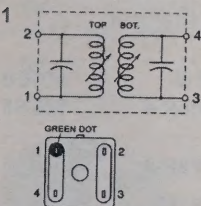
Part #	Description	Price
P-C206 ¹	R.F. Choke, 1.2mH	\$1.00
P-C188 ²	R.F. Choke, 550uH	1.00
P-C189 ³	R.F. Choke, molded, 220uH	1.00



I.F. Transformers

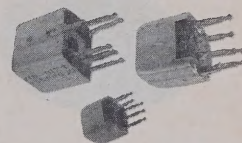
NOS I.F. transformers in 3/4" square cans. While Supplies Last

Part #	Hz	Mounting	Price
P-C214	10.7 mHz	two #6-32 mounting studs	\$4.95
P-C215	19 kHz	mounting clamp	4.95
P-C218	10.7 mHz	universal pc mount (hex slug tuned)	4.95
P-C10D7 ³	10.7 MHz Ratio Det	pc mount (hex slug tuned)	9.95
P-C455 ¹	455 kHz	pc mount (hex slug tuned)	9.95
P-C455KT ²	455 kHz	pc mount (K-tran cup tuned)	5.95



I.F. Transformers for Transistor Radios

Part #	Hz	Description	Price
P-C208R	455 Hz	Red cap- detector	\$0.50
P-C208B	455 Hz	Blue cap- mixer	.50
P-C208Y	455 Hz	Yellow cap- center I.F.	.50



Universal Replacement Coils

Will replace broadcast band coils in any tube type radio. Adjustable inductance for perfect tracking. Mount on bus wire leads or in 5/16" hole. Coils are similar to Miller numbers that correspond.

Part #	Description	Price
P-C70-A	Antenna Coil	\$7.75
P-C70-OSC	Oscillator Coil	7.75
P-C70-RF	R.F. Coil	7.75



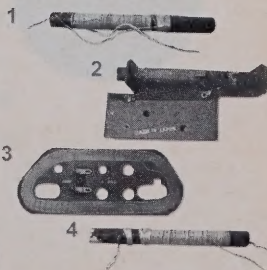
Oscillator Coils

Part #	Description	Price
P-C76	3 lug, 225 uHY	\$2.95
P-C78	3 lug, 142 uHY	2.95
P-C77	4 lug, 125 uHY	2.95



Antenna Coils

Part #	Description	Price
P-C72 ¹	230uH 4 1/4" x 1 1/32", Ferrite	\$4.95
P-C73 ²	250uH 3 1/2" x 9/32", Ferrite	4.95
P-C74 ³	270uH 6 3/4" X 2 3/4"	4.95
P-C75 ⁴	650uH, 4 1/4" x 1 1/32", Ferrite	4.95



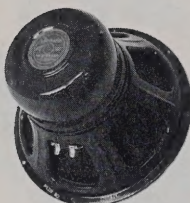
Ferrite Rods

Rods are made of 61 Ferrite material, and have a broadcast band of 640KC to 1650KC.

.375" ± 0.020" diameter x 5.00" ± 0.100" long	P-FR1	\$8.95
.375" ± 0.020" diameter x 7.50" ± 0.150" long	P-FR2	9.95

If you don't see the size you need, we have a limited stock of NOS rods. Just call and ask!

fax: 480.820.4643 OR 800.706.6789 (us & canada only)



The P series of Jensen Loudspeakers uses the legendary AlNiCo type speaker magnet

<i>P Series</i>	<i>Size</i>	<i>Ohms</i>	<i>RMS/Peak</i>	<i>Response</i>	<i>Voice Coil Diameter</i>	<i>Part #</i>	<i>Price</i>
P8R-4	8"	4	25/50	80-8k	1"	P-A-P8R-4	\$59.95
The heart and soul of smaller vintage combos and studio amps, this is a great replacement for the Fender® Champ.							
P8R-8	8"	8	25/50	80-8k	1"	P-A-P8R-8	59.95
P10R	10"	8	25/50	80-6k	1"	P-A-P10R	64.95
This speaker has occupied the finest guitar amplifiers in the world. Very versatile for clean leads, punchy bass, and scorching rock sounds. Pure Vintage!							
P10R-16	10"	16	25/50	80-6k	1"	P-A-P10R-16	64.95
P12R	12"	8	25/50	60-8k	1"	P-A-P12R	69.95
A classic AlNiCo 12" speaker made for lower wattages. The P12R sings with bell like highs along with a warm, extended lower frequency range.							
P12N w/bell	12"	8	50/100	60-8k	1.5"	P-A-P12N	164.95
This classic AlNiCo magnet speaker was one of the original guitar amplifier speakers from as early as 1952.							
P12N-16 w/bell	12"	16	50/100	60-8k	1.5"	P-A-P12N-16	164.95
P12N-NB	12"	8	50/100	60-8k	1.5"	P-A-P12N-NB	154.95
The "naked" version of the P12N, it doesn't have the bell cover over the magnet. A bell cover can be added later using the "N" size cover.							
P12N-NB-16	12"	16	50/100	60-8k	1.5"	P-A-P12N-NB-16	154.95
P15N	15"	8	50/100	50-4k	1.5"	P-A-P15N	189.95
Some guitarists feel that a 15" speaker is the only way to get an instrument's true tone without compromise.							
P15N-16	15"	16	50/100	50-4k	1.5"	P-A-P15N-16	189.95

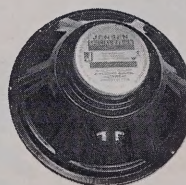
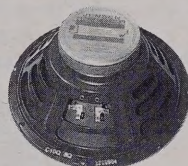
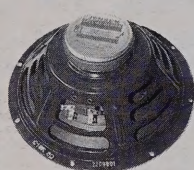
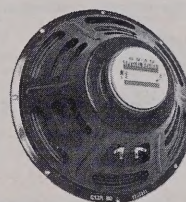
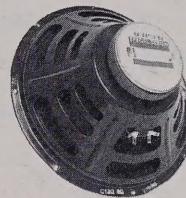
<i>J Series</i>	<i>Size</i>	<i>Ohms</i>	<i>RMS/Peak</i>	<i>Response</i>	<i>Voice Coil Diameter</i>	<i>Part #</i>	<i>Price</i>
J15/200	15"	8	200/400	50-4k	2"	P-A-J15/200	\$99.95
Designed for PA and instrument applications, the J15/200 is the perfect 15" speaker for high wattage amplifiers and subwoofer cabinets.							
J15/200-16	15"	16	200/400	50-4k	2"	P-A-J15/200-16	99.95



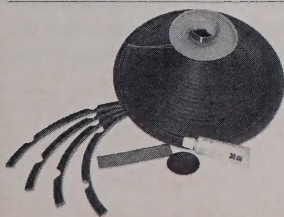
<i>Bell Covers</i>	<i>Usage</i>	<i>Part #</i>	<i>Price</i>
Bell-R	P8R, P10R, P12R	P-A-BELL-R	\$22.75
Bell-N	P12N, P15N	P-A-BELL-N	29.25

The C series of Jensen Loudspeakers uses ceramic type speaker magnets

C Series	Size	Ohms	RMS/Peak	Response	Voice Coil Diameter	Part #	Price
C8R-4	8"	4	25/50	80-8k	1"	P-A-C8R-4	\$26.95
This speaker has an amazing range in a compact size. It is used most often for smaller studio and practice amps, however, the tone rivals speakers twice its size.							
C8R-8	8"	8	25/50	80-8k	1"	P-A-C8R-8	26.95
C10R	10"	8	25/50	80-6k	1"	P-A-C10R	29.95
A low wattage 10" speaker with a loud voice. The C10R can cut through the noise for scorching leads.							
C10Q	10"	8	35/70	80-6k	1.25"	P-A-C10Q	34.95
One of Jensen's most popular models, this speaker features bell-like highs and a smooth midrange. Versatile enough for anything from surf music to hard edge rock.							
C10Q-16	10"	16	35/70	80-6k	1.25"	P-A-C10Q-16	34.95
C12R	12"	8	25/50	70-6k	1"	P-A-C12R	34.95
Vintage tone in a low wattage 12" speaker.							
C12Q	12"	8	35/70	70-6k	1.25"	P-A-C12Q	42.95
Great character and power handling makes this speaker an excellent choice for amplifiers needing vintage tone.							
C12N	12"	8	50/100	70-7k	1.5"	P-A-C12N	59.95
The C12N is the definitive rock and roll speaker, used by almost every major amplifier manufacturer in the 1960's.							
C12N-16	12"	16	50/100	70-7k	1.5"	P-A-C12N-16	59.95
C12K	12"	8	100/200	70-7k	1.5"	P-A-C12K	79.95
This high wattage speaker has great highs and an extended midrange for versatility in both clean and overdriven settings.							
C15N	15"	8	50/100	50-4k	1.5"	P-A-C15N	89.95
A 15" speaker has wider range of tone reproduction. Smooth highs and deep lows.							
C15N-16	15"	16	50/100	50-4k	1.5"	P-A-C15N-16	89.95
C15K	15"	8	100/200	50-4k	2"	P-A-C15K	99.95
Jensen 15" ceramic magnet speakers have biting highs for lead and a throaty low end for overdriven chords. Excellent as guitar amps or in Leslie speaker cabinets.							
C15K-16	15"	16	100/200	50-4k	2"	P-A-C15K-16	99.95



Recone Kits	Part #	Price
P10R	K-RC-P10R	\$69.95
C10R	K-RC-C10R	34.95
C10Q	K-RC-C10Q	39.95
C12N	K-RC-C12N	64.95



Recone your original Jensen Speakers with these kits. As reconing is a specialized skill, these do not come with instructions and are for use by those who have experience in speaker reconing. Original Jensen Speaker Recone Kits are made exclusively for older "Original" Jensen speakers (made prior to 1980) and contain genuine Jensen components.

These kits **cannot** be returned or used on Jensen re-issue Vintage Series Models.

fax: 480.820.4643 OR 800.706.6789 (us & canada only)

Model	Size	Ohms	RMS/Peak	Response	Voice Coil Diameter	Part #	Price
<i>General Guitar</i>							
G10L-35	10"	8	35/70	100-6k	1.25"	P-A-G10L35	\$61.95
G12T-75	12"	8	75/150	75-5k	1.75"	P-A-G12T75	94.95
This is the industry standard 12" loudspeaker, found in all recent 4x12 Marshall™ amplifiers.							
G12T-75-16	12"	16	75/150	75-5k	1.75"	P-A-G12T75-16	94.95
<i>Specialist Guitar</i>							
Vintage 10	10"	8	60/120	80-5k	1.75"	P-A-VINT10	74.95
This speaker is a smaller version of the world renowned Vintage 30, with it's classic warm tones and second to none capacity for sound.							
Vintage 10-16	10"	16	60/120	80-5k	1.75"	P-A-VINT10-16	74.95
Vintage 30	12"	8	60/120	80-5k	1.75"	P-A-VINT30	114.95
Great combo performer, this speaker thrives on high gain amps set to the max, masses of volume and sustain, combined with tight, responsive single note definition.							
Vintage 30-16	12"	16	60/120	80-5k	1.75"	P-A-VINT30-16	114.95
G12H	12"	8	30/60	75-5k	1.75"	P-A-G12H	121.95
With roots dating to the 1970's, the G12H has a tight, controlled bottom and a great midrange presence. Anniversary Edition.							
G12H-16	12"	16	30/60	75-5k	1.75"	P-A-G12H-16	121.95
G12M	12"	8	25/50	75-5k	1.75"	P-A-G12M	101.95
Greenback Warmth and woodiness are the essential characteristics to this sound, with the ability to respond instantly to the most subtle dynamic changes.							
G12M-16	12"	16	25/50	75-5k	1.75"	P-A-G12M-16	101.95
G12M-70	12"	8	70/140	80-5k	1.5"	P-A-G12M70	99.00
Modern Lead Greatest when pumping out hard rock or metal, this modern lead speaker is the standard replacement in all 4x12 Marshall™ amplifiers.							
G12M-70-16	12"	16	70/140	80-5k	1.5"	P-A-G12M70-16	99.00
G12-80	12"	8	80/160	75-5k	1.75"	P-A-G1280	121.95
Classic Lead If you're looking for improved power handling and warmth, this speaker is what you want! Perfect replacement or upgrade for 4x12 Marshalls™.							
G12-80-16	12"	16	80/160	75-5k	1.75"	P-A-G1280-16	121.95
G12	12"	8	15/30	75-5k	1.75"	P-A-G12	259.95
AlNiCo Blue Designed in the 50's, this speaker uses the original magnet to provide the tonal definition and dynamic range they are known for. Vox Bulldog speaker.							
G12-16	12"	16	15/30	75-5k	1.75"	P-A-G12-16	259.95
AlNiCo Blue							



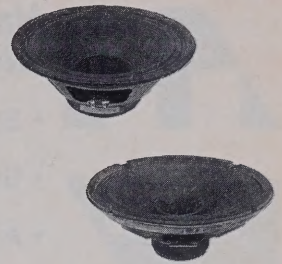
G12 Century 12" 8 80/160 75-5k 1.75" **P-A-CNTRY** **229.95**
 With the G12 Century, you get a speaker with low weight and previously unheard of performance. This new speaker has the ability to deliver extremely high Sound Pressure Levels (121dB@1 meter) in an ultra light weight (3.5 lbs) package. The secret to this speaker is the never-before-used Neodymium alloy magnet structure.



Musical Instrument Speakers

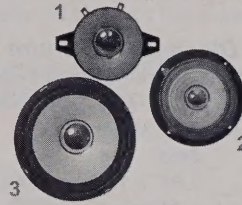
Full range replacement speakers for guitar amplifiers. Made in the USA, except P-A603. *While Supplies Last!*

Part #	Mfg.	Size	Impedance	Watts	Price
P-A603	Jensen	8"	8 ohms	20	\$17.95
P-A704	AES	10"	8 ohms	50	29.95
P-A702	Kendrick	10"	8 ohms	20	39.95
P-A705	AES	12"	8 ohms	75	29.95
P-A706	AES	15"	8 ohms	100	39.95

**3-way Speaker Set**

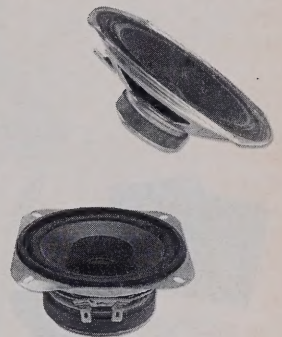
Includes woofer, midrange and tweeter shown. Branded "Pilot Audio." Weights shown are speaker weights, **not** magnet weights. 8 ohm speakers. No other specifications available.

1	2" tweeter	.3 lbs
2	5" midrange	1.1 lbs
3	8" woofer	1.6 lbs.
	P-AS852	\$9.95

**Loose Replacement Speakers**

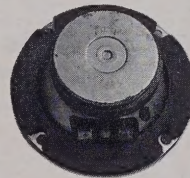
High quality, permanent magnet. For electro-dynamic speakers we suggest substituting a 5 or 10 watt wirewound resistor of approximately the same resistance as the old field coil. See the Tech Corner of our website for instructions *While Supplies Last.*

Part #	Shape	Size	Impedance	Watts	Price
P-A599	Square	4"	4 ohms	2	\$7.95
P-A600	Square	4"	8 ohms	1	7.95
P-A601	Pin Cushion	5"	6 ohms	5	8.95
P-A6375-3A	Oval	3 3/4" x 6"	3.2 ohms	?	1.95
P-A602	Pin Cushion	6"	8 ohms	10	7.95
P-A603	Round	8"	8 ohms	20	17.95
P-A606	Pin Cushion	4 1/4"	4 ohms	15	4.95

**3" Tweeter**

CTS, 8 ohm 5 oz. ceramic magnet. *While Supplies Last.*

P-ACTS03 \$3.95

**Dynamic Earphones**

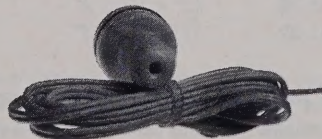
Dynamic earphones for use in transistor radio and other applications.

500 ohm resistance, 3.5 mm plug

P-A482 \$0.50

15 ohm resistance, no plug

P-A483 .50



See page 53 for crystal earphones

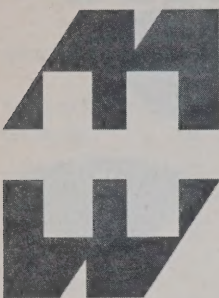
High Impedance Double Headset

High quality 2000 ohm double headphone. Has black light weight plastic ear caps, with metal headband, plastic cord and 2 phone tips. Works great with crystal set or our one tube radio kit. 0.5 lb.

P-A466 \$16.95

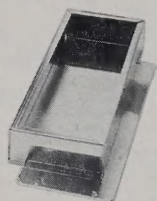


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Hammond Manufacturing General Purpose Steel & Aluminum Chassis Boxes

- Spot welded heavy duty construction chassis
- Steel Boxes are Painted ASA 61 Grey Baked Enamel Finish
- Aluminum boxes are natural finish
- Covers are punched with 4 holes - $\frac{3}{16}$ " dia.



1590 Series Diecast Aluminum Enclosures

- Contersunk Lid with Machine Screws into drilled and tapped holes
- Lap joint construction provides protection from dust and water
- Vibra finished, no sharp edges

Part	Size	Price
P-H1590A	3.63" x 1.52" x 1.07"D	\$6.30
P-H1590B	4.38" x 2.4" x 1.07"D	7.20
P-H1590BB	4.7" x 3.7" x 1.18"D	10.53
P-H1590C	4.7" x 3.7" x 2.06"D	9.36
P-H1590D	7.39" x 4.72" x 2.06"D	17.25
P-H1590E	7.39" x 4.72" x 3.06"D	18.45
P-H1590F	7.41" x 7.41" x 2.5"D	24.81
P-H1590LB	1.98" x 1.84" x 1.07"D	6.50
P-H1590V	4.72" x 4.72" x 3.54"D	19.80

Aluminum Chassis Boxes

Note: Dimensions shown are exterior measurements

Part	Thickness	Size	Price	Cover	Price
P-H1444-8	.04"	6" x 4" x 2"	\$7.30	P-H1434-8	\$3.68
P-H1444-12	.04"	7" x 5" x 2"	7.98	P-H1434-12	3.61
P-H1444-16	.04"	10" x 6" x 2"	10.43	P-H1434-16	5.53
P-H1444-18	.04"	13.5" x 5" x 2"	11.05	P-H1434-18	5.90
P-H1444-22	.051"	12" x 8" x 2"	18.20	P-H1434-22	7.80
P-H1444-32	.051"	17" x 10" x 3"	24.85	P-H1434-30	8.25

20 Gauge Steel Chassis Boxes

Note: Dimensions shown are exterior measurements

Part	Size	Price	Cover	Price
P-H1441-8	6" x 4" x 2"	\$7.90	P-H1431-8	\$3.98
P-H1441-12	7" x 5" x 2"	8.62	P-H1431-12	3.91
P-H1441-16	10" x 6" x 2"	11.27	P-H1431-16	5.97
P-H1441-18	13.5" x 5" x 2"	11.93	P-H1431-18	6.36
P-H1441-22	12" x 8" x 2"	19.67	P-H1431-22	8.46
P-H1441-29	12" x 10" x 2"	19.77	P-H1431-29	8.46
P-H1441-32	17" x 10" x 3"	26.84	P-H1431-30	8.92

Black Powder Coated 20 Gauge Steel Chassis Boxes

Only Available Through Us! Coverplates are included.

Part #	Measurements	Price
P-H14-8BK	6" x 4" x 2"	\$14.50
P-H14-12BK	7" x 5" x 2"	15.30
P-H14-16BK	10" x 6" x 2"	21.06
P-H14-18BK	13.5" x 5" x 2"	22.34
P-H14-22BK	12" x 8" x 2"	34.37
P-H14-32BK	17" x 10" x 3"	43.70

Steel Cages - 20 Gauge

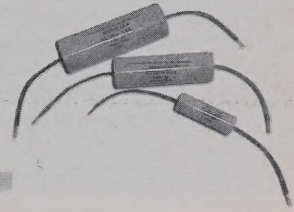
Note: Dimensions shown are exterior measurements

Part	Size	Price
P-H1451-16	10" x 6" x 5.2"	\$27.41
P-H1451-22	12" x 8" x 5.2"	31.28
P-H1451-30	17" x 10" x 5.2"	37.83

MusiCaps® by HOVLAND

Hovland MusiCaps enable sensitive audio circuits to achieve their ultimate level of performance. MusiCaps are individually machine-rolled, and the leads are carefully hand-soldered using lead-free silver-bearing solder. Our leads are stranded, teflon insulated, silver-plated copper. In addition, the winding method and density of MusiCaps helps quell microphonic tendencies.

As a result of the premium materials used to produce MusiCaps, they are approximately 100% larger than common metalized capacitors. MusiCap lead lengths are approximately 2 inches on coupling caps. The red lead is the foil inner edge. It is preferable to connect the red lead towards the output of the circuit.



- Manufactured entirely in USA.
- Extremely low DA, DF and ESR.
- 100% pre-testing for absolute quality assurance.
- Consistent, even, winding tension assures freedom from microphonics.

Coupling Capacitors-Film & Foil Polypropylene

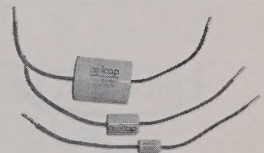
22 awg. silver-plated teflon insulated axial leads; Round case. $\pm$ 5% tolerance

Part #	Value	WVDC	(Dia. x Length)	Price
C-HD01-1600	.01 μ F	1600	.39" x 1.17"	\$8.79
C-HD022-1000	.022 μ F	1000	.44" x 1.25"	8.79
C-HD047-1000	.047 μ F	1000	.54" x 1.75"	10.89
C-HD1-400	.1 μ F	400	.41" x 1.28"	7.79
C-HD15-400	.15 μ F	400	.43" x 1.25"	9.39
C-HD1-600	.1 μ F	600	.50" x 1.75"	10.39
C-HD22-400	.22 μ F	400	.55" x 1.50"	10.19
C-HD22-600	.22 μ F	600	.62" x 2.00"	12.99
C-HD33-600	.33 μ F	600	.57" x 2.25"	16.49
C-HD47-400	.47 μ F	400	.59" x 2.00"	11.49
C-HD47-600	.47 μ F	600	.80" x 2.50"	19.49
C-HD68-400	.68 μ F	400	.76" x 2.00"	15.79
C-H1-200	1.0 μ F	200	.68" x 2.00"	13.89
C-H1-400	1.0 μ F	400	.78" x 2.50"	19.49
C-H2-400	2.0 μ F	400	.98" x 3.00"	24.69
C-H3-200	3.0 μ F	200	.92" x 2.88"	24.29
C-H4D7-100	4.7 μ F	100	.95" x 2.75"	25.39

auricap

High resolution capacitors. Used in Airtight, Bottlehead and Rowel

Jennifer WhiteWolf-Crock of Jena Labs, www.jenalabs.com writes: "Auricap has become my reference standard for audio caps. My customers always comment about how much better and more natural their audio gear sounds when I install Auricaps. The highs are smooth and clear without tizzyness or hash or dulling roll off. The mids are meaty and full of emotions when the source offers it. 'Three D' sound staging should be Auricaps middle name. Bass is tight and well connected, chesty and textured with power and authority. Best of all is not that these separate frequency groups sound so good as separate elements, but that they sound so 'together' and 'as one whole' when music plays through them. I sense no loss of rhythm, pacing, or emotion in circuits that employ these parts. An outstanding technical feat."



Part #	Capacity	Volts	(Dia. x Length)	Price
C-AUD1-450	.1 μ F	450	.42" x .53"	\$6.25
C-AUD22-450	.22 μ F	450	.50" x .60"	7.55
C-AUD33-450	.33 μ F	450	.60" x .65"	7.95
C-AUD47-450	.47 μ F	450	.60" x .78"	8.65
C-AUD68-450	.68 μ F	450	.69" x .87"	9.35
C-AU1-450	1 μ F	450	.77" x .90"	10.55
C-AUD01-600	.01 μ F	600	.36" x .40"	5.95
C-AUD022-600	.022 μ F	600	.45" x .53"	6.30
C-AUD047-600	.047 μ F	600	.52" x .65"	7.00
C-AU1-600	1 μ F	600	1.27" x 1.40"	24.95

fax: 480.820.4643 OR 800.706.6789 (us & canada only)

Orange Drop Notes**Why use Film/Foil Capacitors?**

Film/Foil capacitors are used rather than ceramic, tantalum or aluminum electrolytic types when capacitance stability, high pulse current and/or dissipation factor (heat loss) are of concern. Film/Foil capacitors are manufactured with capacitance values less than 1.0 microfarad and tolerances ranging from 1% to 10%. In comparison to other types of capacitors, Film/Foil designs offer: High insulation resistance, excellent pulse and current carrying capability, low dissipation factor, capacitance stability, low dielectric absorption, high pulse rise time (dv/dt), non-polarized and high frequency performance.

What is the difference between Film/Foil and metalized film capacitors?

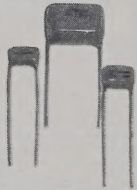
Film/Foil capacitors consist of two plates of aluminum foil, which act as the electrodes, separated by a film used as the dielectric. These materials are non-inductively wound to form the capacitor section. The wire leads are welded directly to the aluminum foil which extends out on both sides of the capacitor section, hence the term extended foil design. In order to provide the utmost in dependability a sufficient thickness of dielectric film is essential. This construction criteria is the primary reason why the physical dimensions of Film/Foil capacitors are larger than that of the metalized types.

In contrast to the Film/Foil capacitor, where the electrode is an independent layer of aluminum foil, the electrode for the metalized film capacitor is an extremely thin layer of metal which is vacuum-deposited directly onto the dielectric film. The wire lead is connected to the electrodes by means of a metal spray applied to each end of the capacitor section; the lead is welded to this metal end spray. Metalized film capacitors are manufactured using a thinner dielectric film than that which is used in the same rated Film/Foil design. This is possible due to the self-healing characteristics of the metalized film. Self-healing or clearing removes a fault or short circuit in the dielectric film by vaporizing the metal electrode surrounding the defect and isolating the area.

**SBE 715P**

Rated for 85°C operation. Radial Leads. Polypropylene Film $\pm 5\%$ tolerance

Part #	Diameter	Length	1-24	25+
C-RD001-600	0.40"	0.75"	\$0.55	\$0.47
C-RD0022-600	0.40"	0.75"	.55	.47
C-RD0033-600	0.40"	0.75"	.55	.47
C-RD0047-600	0.45"	0.75"	.55	.47
C-RD0056-600	0.45"	0.75"	.60	.51
C-RD01-600	0.45"	0.95"	.65	.56
C-RD015-600	0.50"	0.95"	.65	.56
C-RD022-600	0.55"	0.95"	.82	.70
C-RD033-600	0.55"	1.30"	.94	.80
C-RD047-600	0.60"	1.30"	.84	.72
C-RD1-600	0.75"	1.30"	1.22	1.04
C-RD22-600	0.85"	1.70"	2.05	1.75
C-RD47-400	0.90"	1.55"	1.99	1.69

**SBE 716P High Performance "Orange Drop" Capacitors**

The Type 716P Orange Drop is a high performance version of the popular 715P series. They are made from polypropylene film and foil with pure copper leads, making them ideal for high pulse current applications. Rated for 85° C operation. $\pm 5\%$ tolerance. Straight radial leads with $\frac{1}{2}$ " spacing, minimum $\frac{1}{8}$ " length.

Part #	Diameter	Length	1-24	25+
C-PD0047-400	0.31"	0.63"	\$0.82	\$0.66
C-PD0056-400	0.36"	0.65"	.83	.67
C-PD01-400	0.39"	0.65"	.86	.69
C-PD015-400	0.44"	0.65"	.87	.70
C-PD022-400	0.43"	0.81"	1.03	.83
C-PD033-400	0.49"	0.89"	1.11	.89
C-PD047-400	0.51"	0.84"	1.18	.95
C-PD1-400	0.60"	1.16"	1.37	1.10
C-PD22-400	0.75"	1.15"	1.70	1.36
C-PD33-400	0.78"	1.54"	2.08	1.67
C-PD47-400	0.93"	1.55"	2.46	1.97
C-PD001-600	0.41"	0.63"	.82	.66
C-PD0022-600	0.39"	0.65"	.82	.66
C-PD0033-600	0.37"	0.61"	.83	.67
C-PD0047-600	0.43"	0.63"	.85	.68
C-PD0056-600	0.43"	0.63"	.86	.69
C-PD01-600	0.50"	0.65"	.91	.73
C-PD015-600	0.51"	0.85"	1.05	.84
C-PD022-600	0.56"	0.85"	1.14	.92
C-PD033-600	0.64"	0.86"	1.25	1.00
C-PD047-600	0.62"	1.19"	1.31	1.05
C-PD1-600	0.82"	1.18"	1.84	1.48
C-PD22-600	0.95"	1.56"	2.36	1.89

SBE6PS-P22
224K600V 9466

How To "Read" Orange Drop Capacitors

Need to determine the value of an Orange Drop cap?

Use the code at left to determine it's value.

Manufacturer Part Number

224 = capacitance in pico farads

1st two digits are significant digits, 3rd digit is number of digits that follow
ie: 22 + 0000 = 220,000 pF = .22 μ F

K = tolerance, F = 1%, J = 5%, K = 10%

600V = voltage rating

9644 = date code ie: 44th week of 1996

SBE Type PSPolyester film, 600V, $\pm 10\%$ tolerance

Part #	Diameter	Length	1-9	10-49	50+
C-SD0012-600	0.33"	0.70"	\$0.62	\$0.56	\$0.47
C-SD0015-600	0.33"	0.70"	.62	.56	.47
C-SD0018-600	0.33"	0.70"	.62	.56	.47
C-SD002-600	0.33"	0.70"	.62	.56	.47
C-SD0025-600	0.35"	0.70"	.62	.56	.47
C-SD0027-600	0.35"	0.70"	.62	.56	.47
C-SD003-600	0.35"	0.70"	.62	.56	.47
C-SD0033-600	0.35"	0.70"	.62	.56	.47
C-SD004-600	0.38"	0.70"	.64	.58	.48
C-SD005-600	0.38"	0.70"	.65	.59	.49
C-SD0056-600	0.40"	0.70"	.65	.59	.49
C-SD006-600	0.40"	0.70"	.65	.59	.49
C-SD0068-600	0.40"	0.70"	.65	.59	.49
C-SD0075-600	0.40"	0.70"	.70	.63	.53
C-SD008-600	0.40"	0.90"	.70	.63	.53
C-SD0082-600	0.40"	0.90"	.70	.63	.53
C-SD01-600	0.40"	0.90"	.70	.63	.53
C-SD015-600	0.40"	0.90"	.80	.72	.60
C-SD02-600	0.45"	0.90"	.87	.79	.65
C-SD025-600	0.45"	0.90"	1.21	1.09	.91
C-SD03-600	0.45"	1.20"	1.21	1.09	.91
C-SD033-600	0.45"	1.20"	1.21	1.09	.91
C-SD04-600	0.55"	1.20"	1.25	1.13	.94
C-SD05-600	0.55"	1.20"	1.33	1.20	.99
C-SD056-600	0.60"	1.20"	1.33	1.20	.99
C-SD06-600	0.60"	1.20"	1.33	1.20	.99
C-SD068-600	0.60"	1.20"	1.33	1.20	.99
C-SD075-600	0.60"	1.20"	1.44	1.30	1.08
C-SD082-600	0.65"	1.20"	1.45	1.31	1.09
C-SD1-600	0.65"	1.20"	1.42	1.28	1.07
C-SD15-600	0.70"	1.60"	1.99	1.79	1.49
C-SD2-600	0.80"	1.60"	2.88	2.59	2.16
C-SD22-600	0.80"	1.60"	2.98	2.68	2.24
C-SD25-600	0.80"	1.60"	2.99	2.69	2.24
C-SD33-600	0.89"	1.81"	3.84	3.45	2.88
Polypropylene film, 1600V, $\pm 10\%$ tolerance			Each		
C-SD001-1600	0.50"	1.30"	\$0.92		
C-SD002-1600	0.50"	1.30"	.92		
C-SD003-1600	0.50"	1.30"	.92		
C-SD0039-1600	0.50"	1.30"	.92		
C-SD005-1600	0.50"	1.30"	.92		
C-SD006-1600	0.55"	1.30"	1.06		
C-SD0068-1600	0.55"	1.30"	1.06		
C-SD01-1600	0.60"	1.30"	1.21		
C-SD02-1600	0.65"	1.70"	1.64		
C-SD03-1600	0.75"	1.70"	1.78		
C-SD05-1600	0.85"	1.70"	2.32		

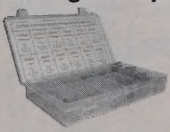


Great small polypropylene coupling capacitors. Radial Leads

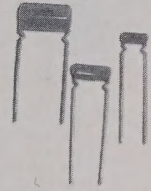
Part #	μF	Volts	1-24	25+
C-XP001-630	.001	630	\$0.48	\$0.43
C-XP0022-630	.0022	630	.48	.43
C-XP0047-630	.0047	630	.48	.43
C-XP01-630	.01	630	.48	.43
C-XP022-630	.022	630	.52	.47
C-XP047-630	.047	630	.72	.65
C-XP01-630	.1	630	.80	.72
C-XP022-630	.22	630	1.10	.99
C-XP047-630	.47	630	1.98	1.78

Orange Drop Capacitor Kit

Contains 6 of each of the following values in the Type PS (600V, polyester) and Type 715P (600V, polypropylene), 72 pieces total. Save over purchasing individually, and you get a sturdy plastic organizer. **Values:** .0033, .0056, .01, .022, .047, .1 μF **C-RS1 \$49.95**

**Miscellaneous Orange Drops**

C-SD0033-800	.0033 μF , 800V	\$0.65
C-SD0047-800	.0047 μF , 800V	.45
C-SD0082-1600	.0082 μF , 1600V	.90

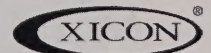


When ordering capacitors you want to look for three things: the type of capacitor, the capacity (micro or pico farads) and the voltage rating. Our capacitor part numbers read per the following example:

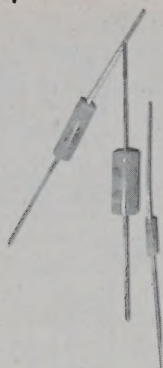
C-TD01-400
1 2 3

- 1) Capacitor - Type
- 2) Capacity - micro or pico farads
D is decimal point (0.01)
- 3) Voltage Rating
(400VDC)

Unless noted, capacity is given in microfarads (μF). If the part number has just the micro or pico farads listed then the voltage is the same for all values and is listed in the description of the part. An example of this is the silver mica capacitors.



fax: 480.820.4643 OR 800.706.6789 (us & canada only)

**Metalized Polyester Tubular**Tolerance $\pm 10\%$, non-inductive, self healing windings, axial leads.

Part #	Diameter	Length	1-9	10-49	50+
C-TD01-400	0.22"	0.55"	\$0.38	\$0.34	\$0.29
C-TD015-400	0.22"	0.55"	.38	.34	.29
C-TD022-400	0.22"	0.55"	.38	.34	.29
C-TD033-400	0.24"	0.55"	.53	.48	.40
C-TD047-400	0.28"	0.55"	.42	.38	.32
C-TD068-400	0.26"	0.75"	.42	.38	.32
C-TD1-400	0.30"	0.75"	.48	.43	.36
C-TD15-400	0.33"	0.75"	.53	.48	.40
C-TD22-400	0.39"	0.75"	.60	.54	.45
C-TD33-400	0.39"	0.98"	.65	.59	.49
C-TD47-400	0.45"	0.98"	.66	.60	.50
C-TD68-400	0.51"	1.26"	.93	.84	.70
C-T1-400	0.59"	1.26"	1.05	.95	.79
C-T2D2-400	0.79"	1.26"	2.03	1.83	1.53

C-TD001-630	0.18"	0.39"	.63	.57	.47
C-TD0015-630	0.18"	0.39"	.66	.60	.50
C-TD0022-630	0.18"	0.39"	.57	.51	.43
C-TD0033-630	0.18"	0.39"	.57	.51	.43
C-TD0047-630	0.18"	0.39"	.45	.41	.34
C-TD0068-630	0.18"	0.39"	.45	.41	.34
C-TD01-630	0.24"	0.55"	.42	.38	.32
C-TD015-630	0.26"	0.55"	.42	.38	.32
C-TD022-630	0.26"	0.55"	.44	.40	.33
C-TD033-630	0.26"	0.75"	.57	.51	.43
C-TD047-630	0.30"	0.75"	.52	.47	.39
C-TD068-630	0.33"	0.75"	.58	.52	.44
C-TD1-630	0.39"	0.75"	.66	.59	.50
C-TD15-630	0.43"	0.75"	.71	.64	.53
C-TD22-630	0.43"	0.98"	.75	.68	.56
C-TD33-630	0.47"	0.98"	.87	.78	.65
C-TD47-630	0.51"	1.26"	.98	.88	.74
C-TD68-630	0.59"	1.26"	1.13	1.02	.85
C-T1-630	0.67"	1.26"	1.45	1.31	1.09
C-T1D5-630	0.75"	1.26"	1.98	1.78	1.49
C-T2D2-630	0.79"	1.85"	2.55	2.30	1.91

When ordering capacitors you want to look for three things: the type of capacitor, the capacity (micro or pico farads) and the voltage rating. Our capacitor part numbers read per the following example:

C-TD01-400
1 2 3

- 1) Capacitor - Type
- 2) Capacity - micro or pico farads
D is decimal point (0.01)
- 3) Voltage Rating
(400VDC)

Unless noted, capacity is given in microfarads (μF). If the part number has just the micro or pico farads listed then the voltage is the same for all values and is listed in the description of the part. An example of this is the silver mica capacitors.

Metalized Polypropylene TubularTolerance $\pm 10\%$, $+105^\circ\text{C}$, non-inductive, self healing windings, axial leads.

Part #	Diameter	Length	1-24	25+
C-UD001-630	0.25"	0.58"	\$0.72	\$0.62
C-UD0015-630	0.25"	0.58"	.82	.70
C-UD0022-630	0.25"	0.58"	.76	.65
C-UD0033-630	0.25"	0.58"	.76	.76
C-UD0047-630	0.25"	0.58"	.76	.76
C-UD0068-630	0.25"	0.58"	.75	.64
C-UD0082-630	0.25"	0.58"	.72	.62
C-UD01-630	0.26"	0.58"	.52	.45
C-UD015-630	0.30"	0.58"	.54	.46
C-UD022-630	0.34"	0.58"	.62	.53
C-UD033-630	0.34"	0.81"	.89	.76
C-UD047-630	0.36"	0.81"	.87	.74
C-UD068-630	0.36"	1.15"	.95	.81
C-UD1-630	0.42"	1.15"	.95	.81
C-UD15-630	0.48"	1.15"	1.26	1.08
C-UD22-630	0.50"	1.34"	1.28	1.09
C-UD33-630	0.61"	1.34"	1.66	1.42
C-UD47-630	0.71"	1.34"	1.91	1.63
C-UD68-630	0.97"	1.34"	2.72	2.32

Sprague Atom

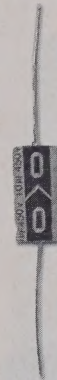
Low leakage current, Long shelf life. Ideal for application in guitar amps, musical equipment, TV sets, auto radios, radio-phone combinations, and electronic testing equipment. Operating temperature -40°C to +85°C (6WVDC - 100WVDC) -20°C to +85°C (101WVDC - 600WVDC).

Part #	Diameter	Length	1-24	25+
C-SA25-25	0.50"	0.25"	\$1.35	\$1.22
C-SA250-25	0.38"	0.94"	1.56	1.41
C-SA25-50	0.25"	0.68"	1.35	1.22
C-SA50-50	0.31"	0.81"	1.36	1.23
C-SA100-100	0.44"	1.50"	2.20	1.98
C-SA8-150	0.38"	0.81"	1.48	1.33
C-SA10-150	0.38"	0.81"	1.48	1.33
C-SA100-350	1.0"	2.63"	5.95	5.36
C-SA16-475	0.88"	1.63"	3.95	3.56
C-SA8-450	0.50"	1.75"	2.65	2.39
C-SA80-450	1.0"	2.63"	5.95	5.36
C-SA100-450	1.25"	0.75"	7.25	6.53
C-SA10-500	0.75"	1.69"	4.10	3.69
C-SA20-500	0.88"	2.25"	4.55	4.10
C-SA40-500	1.0"	2.38"	5.25	4.73
C-SA20-600	1.0"	3.63"	9.25	8.33

Axial Lead Electrolytic

Highest quality low leakage tubular electrolytic capacitors. Rated for 85°C operation. Tolerance -20%, +50%.

Part #	Diameter	Length	1-9	10-49	50+
C-ET10-50	0.25"	0.49"	\$0.51	\$0.46	\$0.38
C-ET22-50	0.25"	0.63"	.63	.57	.47
C-ET33-50	0.32"	0.63"	.63	.57	.47
C-ET4D7-160	0.32"	0.63"	1.75	1.58	1.32
C-ET47-35	0.63"	1.00"	.50	.45	.38
C-ET47-50	0.32"	0.63"	.71	.64	.53
C-ET10-160	0.40"	0.79"	.83	.75	.62
C-ET22-160	0.49"	0.98"	1.03	.93	.77
C-ET33-160	0.49"	1.18"	1.41	1.27	1.06
C-ET47-160	0.49"	1.18"	1.53	1.38	1.15
C-ET100-160	0.63"	1.18"	2.39	2.15	1.79
C-ET47-250	0.63"	1.25"	1.95	1.76	1.47
C-ET4D7-350	0.40"	0.98"	.89	.80	.67
C-ET10-350	0.49"	1.18"	1.05	.95	.79
C-ET22-350	0.63"	1.18"	1.69	1.52	1.27
C-ET33-350	0.63"	1.57"	2.02	1.82	1.52
C-ET47-350	0.71"	1.58"	2.55	2.30	1.91
C-ET100-350	0.98"	2.36"	2.43	2.19	1.82
C-ET4D7-450	0.49"	1.18"	1.38	1.24	1.04
C-ET10-450	0.63"	1.18"	1.28	1.15	.96
C-ET22-450	0.71"	1.57"	1.99	1.79	1.49
C-ET33-450	0.88"	1.57"	2.76	2.49	2.07
C-ET47-450	0.88"	1.96"	3.89	3.50	2.92
C-ET100-450	0.98"	2.36"	4.62	4.16	3.47
C-ET10-500	0.63"	1.18"	2.32	2.09	1.74
C-ET22-500	0.63"	1.57"	2.86	2.58	2.15



Arrows point to negative or ground end of cap.

Other Fresh Stock Electrolytic Caps

Part #	capacity@volts	Size	Type	Price
C-ET4700-16	4700@16	1 5/8" x 5/8"	axial	\$2.25
C-ET2200-25	2200@25	1 5/8" x 5/8"	axial	2.25
C-ET220-50	220@50	5/8" x 3/8"	radial	1.75

NOS Electrolytic Caps

While Supplies Last

Part #	capacity@volts	Size	Type	Price
C-ETD3-600	.3@600	7/8" x 2"	axial	\$2.95
C-ET200-30	200@90V 30@60V	2 5/8" x 1"	radial/clamp	.50
C-ET200-150	200@150	2 1/8" x 1"	axial, Sprague Atom	1.50
C-ET200-300	200@300	3 1/8" x 3/4"	axial	4.50
C-ET22-450-105	22@450 - 105°C rated	1 5/8" x 5/8"	axial	1.50
C-X1-400	1.0@400	1" x 2"	axial, Sprague Atom	4.95

Axial Lead Electrolytic Capacitor Kit

Save 15% over individual prices. Six each of the following types: 22-50, 22-160, 33-160, 100-160, 22-450, 33-450, 47-450, 100-450. See page 31 for similar Orange Drop Kit.

C-ETKIT

\$95.47

Mixed Bag of Electrolytics

Minimum of 50 pieces in each bag.

C-EBAGO

\$1.95

fax: 480.820.4643 OR 800.706.6789 (us & canada only)



Solen "Fast" Capacitors

Solen "FAST CAPACITORS" are made of the highest quality aluminum metalized polypropylene film available. They will directly enhance the efficiency of loudspeaker and other electronic equipment.

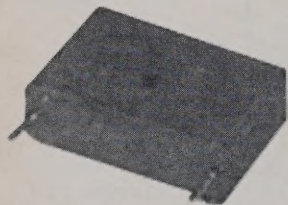
- Very Low Dielectric Absorption Factor
- Very Low Equivalent Series Resistance
- Very Low Inductance
- Very High Resonant Frequency
- Ultra Linear Impedance Characteristics
- Very Low Dissipation Factor
- Very High Insulation Resistance
- Made in France

250VDC, ±5% tolerance

Part #	µF	Size (mm)	1-9	10+
C-FT1-250	1.0	11 x 21	\$1.95	\$1.75
C-FT1D5-250	1.5	12 x 22	2.25	2.05
C-FT2D2-250	2.2	14 x 22	2.45	2.20
C-FT3D3-250	3.3	16 x 25	2.75	2.50
C-FT4D7-250	4.7	18 x 27	3.15	2.85
C-FT5D1-250	5.1	19 x 27	3.20	2.90
C-FT6D8-250	6.8	20 x 30	3.60	3.25
C-FT8D2-250	8.2	21 x 33	4.15	3.75
C-FT10-250	10	23 x 33	4.25	3.85
C-FT15-250	15	25 x 38	6.65	5.99
C-FT22-250	22	28 x 43	8.90	7.99
C-FT39-250	39	34 x 48	11.95	10.75
C-FT47-250	47	38 x 48	14.45	12.99
C-FT56-250	56	39 x 53	20.05	17.99
C-FT68-250	68	41 x 58	23.35	20.99
C-FT82-250	82	45 x 58	27.90	25.10

630VDC, ±5% tolerance

Part #	µF	Size (mm)	1-9	10+
C-FSD1-630	0.1	9 x 17	\$1.45	\$1.30
C-FSD15-630	0.15	9 x 20	1.45	1.30
C-FSD18-630	0.18	10 x 20	1.50	1.35
C-FSD22-630	0.22	11 x 20	1.55	1.40
C-FSD27-630	0.27	11 x 22	1.55	1.40
C-FSD33-630	0.33	12 x 22	1.55	1.40
C-FSD39-630	0.39	12 x 22	1.55	1.40
C-FSD47-630	0.47	13 x 22	1.60	1.45
C-FSD56-630	0.56	14 x 22	1.60	1.45
C-FSD68-630	0.68	15 x 22	1.90	1.70
C-FSD82-630	0.82	15 x 25	1.90	1.70
C-FS1-630	1.0	16 x 25	1.90	1.70
C-FS1D5-630	1.5	18 x 27	2.25	1.99
C-FS2D2-630	2.2	19 x 33	2.40	2.15
C-FS3D3-630	3.3	24 x 33	2.75	2.50
C-FS4D7-630	4.7	25 x 38	3.40	3.05
C-FS5D6-630	5.6	28 x 38	3.70	3.35
C-FS6D8-630	6.8	30 x 38	4.10	3.70
C-FS8D2-630	8.2	30 x 45	4.75	4.30
C-FS10-630	10	32 x 45	5.20	4.70
C-FS15-630	15	36 x 53	6.70	5.99
C-FS22-630	22	42 x 58	8.80	7.95
C-FS33-630	33	49 x 63	10.90	9.80
C-FS39-630	39	53 x 63	14.90	13.40
C-FS47-630	47	54 x 72	15.70	14.15



MKP4

Metalized polypropylene capacitors for stringent requirements.

Part #	Lead Spacing (mm)	Price
C-W4D01-400	7.5	\$0.49
C-W4D015-400	7.5	.55
C-W4D033-400	10.0	.69
C-W4D047-400	10.0	.72
C-W4D068-400	10.0	.79
C-W4D1-400	15.0	.89
C-W4D15-400	15.0	.99
C-W4D22-400	15.0	1.29
C-W4D33-400	22.5	1.79
C-W4D47-400	22.5	2.18
C-W4D68-400	22.5	2.59
C-W41-400	7.5	2.99
C-W4D01-630	10.0	.59
C-W4D015-630	10.0	.61
C-W4D022-630	10.0	.62
C-W4D033-630	10.0	.69
C-W4D047-630	10.0	.79
C-W4D068-630	15.0	.94
C-W4D1-630	15.0	.99
C-W4D15-630	15.0	1.29
C-W4D22-630	22.5	1.99
C-W4D33-630	22.5	2.39
C-W4D47-630	22.5	2.59
C-W4D68-630	27.5	4.12
C-W41-630	27.5	4.25

WIMA

Designed for pc board mounting, but compact size and rectangular shape make them ideal for mounting using terminal strips. **Clearance, New Lower Prices!**

- ±5% tolerance
- -55°C to +100°C temperature range
- All values have 1/4" lead length

MKP10

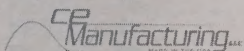
High reliability polypropylene capacitors for pulse applications.

Part #	Lead Spacing (mm)	Price
C-W10D01-400	10.0	\$0.65
C-W10D015-400	10.0	.69
C-W10D022-400	10.0	.72
C-W10D033-400	10.0	.77
C-W10D047-400	15.0	.89
C-W10D068-400	15.0	.99
C-W10D1-400	15.0	.99
C-W10D15-400	15.0	1.39
C-W10D22-400	22.5	1.89
C-W10D33-400	22.5	2.25
C-W10D47-400	22.5	2.59
C-W10D68-400	27.5	3.75
C-W101-400	27.5	4.80
C-W10D01-630	10.0	.69
C-W10D015-630	10.0	.74
C-W10D022-630	15.0	.99
C-W10D033-630	10.0	1.39
C-W10D047-630	10.0	1.79
C-W10D068-630	15.0	1.99
C-W10D1-630	22.5	2.59
C-W10D15-630	22.5	2.99
C-W10D22-630	27.5	3.99
C-W10D33-630	27.5	4.99
C-W10D47-630	27.5	6.75
C-W10D68-630	27.5	8.45
C-W101-630	37.5	9.95



Same diameter as LCR. Great for use in Marshall™ amplifiers. Clamp Required.

Part #	capacity@volts	Measurements	Price
C-EC32-32-500	32/32@500	1 ³ / ₈ " x 2"	\$9.95
C-EC50-50-500	50/50@500	1 ³ / ₈ " x 2"	10.95
C-EC100X2-500	100/100@500	1 ³ / ₈ " x 2 ⁷ / ₈ "	12.95



Coming Soon!

CE Manufacturing will be in full production of the 4 section, 20mfd@475V can capacitor by the end of 2001. Other values are soon to follow!

Part #	capacity@volts	Measurement	1-9	10+
C-EC20X4-475	20/20/20/20@475	1 ³ / ₈ " x 2"	\$32.95	\$29.95

Multi & Single Section Tubular Electrolytics

Fresh stock - no leakage

Part #	capacity@volts	Measurements	Price
C-ER33-47-160	33/47@160	5/8" x 2 ³ / ₄ "	\$6.50
C-ER47-47-160	47/47@160	5/8" x 2 ³ / ₄ "	6.50
C-ER47-80-160	47/80@160	1" x 3 ⁵ / ₈ "	8.50
C-ET10-10	10/10@450	5/8" x 2 ³ / ₄ "	8.50
C-ER33-47-47	33/47/47@160	1" x 3 ⁵ / ₈ "	6.50
C-ER33-33-47	33/33/47@160	1" x 3 ⁵ / ₈ "	8.50
C-ER33-47-22	33/47@160, 22@25	5/8" x 2 ³ / ₄ "	8.50
C-ET16-800	16@800, 900 surge	1 ¹ / ₈ " x 4 ¹ / ₄ "	11.50
C-ET25-800	25@800, 900 surge	1 ¹ / ₈ " x 4 ¹ / ₄ "	12.95

Computer Grade High Capacity Capacitor

High capacity, screw connections. Clamp mount. Clamps sold separately. While Supplies Last.

Part #	capacity@volts	Size	Price
C-EC55000-16	55,000@16	2" x 3 ⁹ / ₁₆ "	\$9.95

Can Capacitor Specials

NOS. Subject to stock on hand. FP is a twist lock, PFP is pc mount which can be used as a twist mount.

Part #	capacity@volts	Type & Size	Price
C-EC20-40-5C-8C	20@350, 40@300, 500/800@50	Mallory PFP, 1 ³ / ₈ " x 3"	\$2.95
C-EC30-500	30@400, 500@50	PFP, 1 ³ / ₈ " x 3"	2.95
C-EC100X4	100/100@450, 100@250, 100@150	PFP, 1 ³ / ₈ " x 3 ¹ / ₂ "	17.95
C-EC220-70-150	220/70@150	PFP, 1" x 2 ¹ / ₈ "	2.95
C-EC300-100-80	300/100/80@150	Mallory PFP, 1 ³ / ₈ " x 2 ¹ / ₂ "	2.95
C-EC200-200-40	200/200@175, 40@300	PFP, 1 ³ / ₈ " x 2 ³ / ₄ "	1.95
C-EC200-150	200/150@350	Nippon Chemi-con PFP, 1 ³ / ₈ " x 4 ¹ / ₂ "	2.95
C-EC30-30-30-10	30/30/30/10@475	Aero M PFP, 1 ³ / ₈ " x 3 ¹ / ₂ "	34.95

Twist Mount Can Mounting Plate

Phenolic insulator or metal plate for mounting FP type can capacitors.

Description	Part #	Price
1" diameter can insulator	S-H121	\$1.25
1" diameter can metal plate	S-H121M	1.50
1 ³ / ₈ " diameter can insulator	S-H120	1.25
1 ³ / ₈ " diameter can metal plate	S-H120M	1.50

Can Capacitor Mounting Clamp

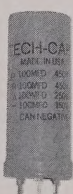
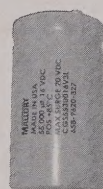
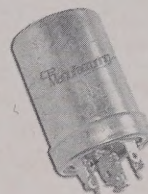
Clamp for mounting electrolytic capacitor cans in vertical position. Supplied with #6-32 screw and nut.

Description	Part #	Price
1" diameter	S-H123	\$1.95
1 ³ / ₈ " diameter	S-H122	1.95
1 ³ / ₄ " diameter	S-H124	1.95
2" diameter	S-H125	1.95

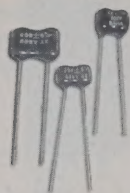
Miscellaneous Can Clamp

2" "C" clamp, 2 hole mounting

1" diameter	S-H411	\$1.95
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fax: 480.820.4643 OR 800.706.6789 (us & canada only)

**Silver Mica**

500 volt, 5% tolerance. Dipped epoxy coating. Capacitance in pico farads.

Part #	pF	1-24	25+
C-SM22	22	\$0.69	\$.62
C-SM47	47	.71	.64
C-SM68	68	.73	.68
C-SM82	82	.78	.70
C-SM100	100	.79	.71
C-SM150	150	.81	.73
C-SM220	220	.83	.75
C-SM250	250	.85	.77
C-SM300	300	.87	.78
C-SM360	360	.96	.86
C-SM390	390	1.05	.95
C-SM500	500	1.09	.98
C-SM680	680	1.20	1.08
C-SM820	820	1.20	1.08
C-SM1000	1000	1.20	1.08

Ceramic Disc

Part #	pF	Tolerance	1-24	25+
2,000 WVDC				
C-D390-2000	390	±10%	\$0.15	\$0.13
C-D470-2000	470	±10%	.18	.16
C-D1000-2000	1000	±10%	.24	.22
C-D2000-2000	2000	±10%	.39	.35
3,000 WVDC				
C-D100-3000	100	±10%	.39	.35
C-D330-2000	330	±10%	.39	.35
C-D470-3000	470	±10%	.39	.35
C-D1000-3000	1000	±10%	.43	.39
C-D5000-3000 WSL*	5000	±20%	1.39	1.25
C-D10000-3000	10000	±20%	1.41	1.27
6,000 WVDC				
C-D220-6000	220	±10%	.44	.40
C-D470-6000	470	±10%	.62	.56
C-D560-6000	560	±10%	.62	.56
C-D1000-6000	1000	±20%	.62	.56
C-D2200-6000 WSL*	2200	±20%	.98	.88
C-D3300-6000 WSL*	3300	±20%	1.25	1.13
10,000 WVDC				
C-D500-10000	500	±20%	1.03	.93
C-D1000-10000 WSL*	1000	±20%	1.05	.95
C-D2500-10000 WSL*	2500	±20%	1.65	1.49

*While Supplies Last

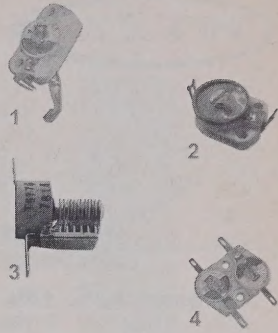
Miscellaneous Capacitors

Description	Part #	Price
Tubular, polystyrene, .01@200. Sold in packages of ten.	C-XTD01-200	\$2.00
Aluminum foil paper in oil, .047@200. Sold individually	C-XD047-200	1.95
Molded, .047@200. Sold in packages of ten.	C-XMD047-200	2.00
Molded, tubular .01@400. Sold in packages of ten.	C-XMD01-400	2.00
Ceramic, 2 1/4" radial leads .01@400. Sold in packages of ten.	C-XSD01-400	2.00
Molded, .047@400, approx. 2" leads. Sold in packages of ten.	C-XMD047-400	2.00
Molded, .056@400. Sold in packages of ten.	C-XMD056-400	2.00
Molded, .0002@500. Sold in packages of ten.	C-XMD0002-500	2.00
Aluminum foil paper in oil, .0051@1200. Sold individually.	C-XD0051-1200	1.50
Mica block, high voltage, .0004@2500. Sold individually.	C-D0004-2500	2.25

APC Variable Trimmer Capacitors

Subject to stock on hand

Description	Part #	Price
3-12 pF, ceramic ¹	C-VT12	\$1.50
2.5-13 pF, ceramic ²	C-VT13	1.50
1.5-15pF, ceramic ³	C-VT1D5-15	1.25
Dual, 3-12, 3-12 pF ⁴	C-VT330	1.50
0-11 pF	C-VT0-11	2.95
1-23 pF	C-VT1-23	3.95
1-3.5 pF	C-VT1-3D5	3.95
1-50 pF	C-VT1-50	3.95
1.3-15 pF	C-VT1D3-15	3.95



Heavy Duty Continuous Duty Variable Capacitor

While Supplies Last

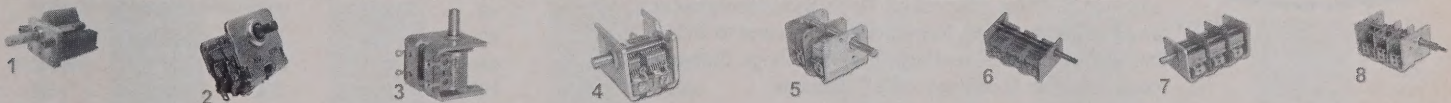
- High voltage, high wattage, continuous duty capacitors
- Insulation between rotor and stator is achieved through $\frac{1}{8}$ " thick, high quality military spec ceramics riveted to plated steel end plates
- End plates are tied together by solid rods, forming a rigid structure
- The rotor rides on ball bearings housed between front end plate and the stainless steel shaft
- Blades are heavy .032" thick aluminum
- The relationship between rotation and capacitance is almost perfectly linear
- Insulated Shaft

Description	Part #	Price
250 pF, 2500V max, .075" air gap, 37 blades	C-V250-2500	\$39.95
250 pF, 3500V max, .12" air gap, 53 blades	C-V250-3500	43.95



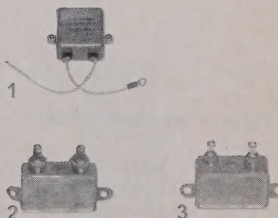
Variable Capacitors

Description	Part #	Price
Single section 100pF, $1\frac{3}{16}$ " long frame, $\frac{1}{4}$ " diameter shaft $\frac{7}{8}$ " long, teflon shaft, ceramic base, screwdriver or knob adjustable, full rotation. ¹	C-V100P	\$17.95
Two section tuning condenser. 0-128 pF with trimmer on both sides. Very nice unit with ball bearing, $\frac{1}{4}$ " shaft length, 3 pc mounting lugs on back. Capacity increases with clockwise rotation. While Supplies Last. ²	C-V130	11.95
Single section 365 pF, $1\frac{3}{16}$ " long frame, $\frac{1}{4}$ " diameter shaft $\frac{9}{16}$ " long, capacity increases with clockwise rotation. ³	C-V365	11.95
Two section 233 and 86 pF, $1\frac{1}{8}$ " long frame, $\frac{1}{4}$ " diameter shaft $\frac{3}{8}$ " long, capacity increases with counterclockwise rotation. ⁴	C-V233-86	17.95
Two section 17 plate 140-30 pF oscillator section with trimmer, 23 plate 300-30 pF RF section with trimmer. Capacity increases with counterclockwise rotation. $2\frac{3}{16}$ " x 1.8" x $1\frac{5}{16}$ ", $\frac{1}{4}$ " rounded shaft. ⁵	C-V300-140	18.95
Three section, 365 pF, $3\frac{1}{4}$ " long frame, $\frac{1}{4}$ " x 1" shaft. Capacity increases with counterclockwise rotation. ⁶	C-V365-X3	24.95
Three section 500 pF, $3\frac{3}{16}$ " long frame, $\frac{1}{4}$ " diameter shaft, $1\frac{1}{16}$ " long, capacity increases with counterclockwise rotation. ⁷	C-V500-X3	24.95
While Supplies Last.		
Three section, double air gap, all sections 7 plate 30-14 pF, no trimmers. Capacity increases with counterclockwise rotation. Outer shaft $\frac{1}{2}$ turn, $\frac{1}{4}$ " flatted, $\frac{5}{16}$ " long. Inner shaft 4 turn, $\frac{1}{8}$ " flatted. While Supplies Last. ⁸	C-VKFMX3	5.95



Oil Filled Capacitors (Bathtub Type)

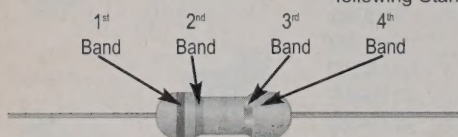
Description	Part #	Price
2 mfd@600. Approximately 2" square, 1" deep, 4" leads. Mounting Centers: $2\frac{3}{8}$ " ¹	C-OF2-600	\$6.95
.1 mfd, 600 VDC. Approximately 2" square, 1" deep. Mounting Centers: $2\frac{3}{8}$ " ²	C-OFD1-600	5.95
.5 mfd@600. Aerovox brand. Approximately $1\frac{1}{2}$ " length, $1\frac{3}{4}$ " wide, $\frac{7}{8}$ " deep. Mounting Centers: $2\frac{1}{4}$ " ³	C-OFD5-600	5.95



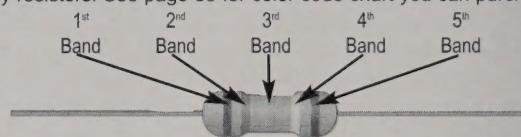
fax: 480.820.4643 OR 800.706.6789 (us & canada only)

How to "Read" a Resistor

Most resistors are color coded with multiple bands to identify the resistance value and the tolerance. While actually measuring the resistance of a resistor before using it is a good idea, it's also a good idea to know what the resistance is supposed to be. Resistors (especially carbon composition) can drift in their actual resistance. Keep a stock of fresh resistors on hand. Use the following Standard EIA color code tables to identify resistors. See page 39 for color code chart you can purchase.

**4 band: $\pm 2\%$, $\pm 5\%$ and $\pm 10\%$ tolerance**

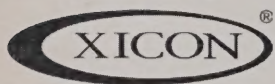
Color	1 st band (1 st figure)	2 nd band (2 nd figure)	3 rd band (multiplier)	4 th band (tolerance)
Black	0	0	10^0	
Brown	1	1	10^1	
Red	2	2	10^2	$\pm 2\%$
Orange	3	3	10^3	
Yellow	4	4	10^4	
Green	5	5	10^5	
Blue	6	6	10^6	
Violet	7	7	10^7	
Gray	8	8	10^8	
White	9	9	10^9	
Gold			10^{-1}	$\pm 5\%$
Silver			10^{-2}	$\pm 10\%$

**5 band: $\pm 1\%$, $\pm .25\%$, $\pm .5\%$ and $\pm 1\%$ tolerance**

Color	1 st band (1 st figure)	2 nd band (2 nd figure)	3 rd band (3 rd figure)	4 th band (multiplier)	5 th band (tolerance)
Black	0	0	0	10^0	
Brown	1	1	1	10^1	$\pm 1\%$
Red	2	2	2	10^2	
Orange	3	3	3	10^3	
Yellow	4	4	4	10^4	
Green	5	5	5	10^5	$\pm 0.5\%$
Blue	6	6	6	10^6	$\pm 0.25\%$
Violet	7	7	7	10^7	$\pm 0.1\%$
Gray	8	8	8	10^8	
White	9	9	9	10^9	
Gold				10^{-1}	
Silver				10^{-2}	

How to Order Resistors

- 1) Determine the type of resistor you want. For example, carbon film, 1 watt. The part number begins with "R-B" for this type.
- 2) Determine the ohm value you want. For example, 1K (1,000 ohms).
- 3) Order "R-B1K" in the package size you want. Example: R-B1K, 20 pcs.

**Carbon Film Resistors**

Carbon film resistors are made by vacuum depositing a thin carbon film on a ceramic form. Available in $\frac{1}{2}$ and 1 watt ratings. A good choice for applications which require a steady, low power drop.

- $\pm 5\%$ tolerance
- $-55^\circ\text{C} \sim 155^\circ\text{C}$ operating range
- High stability
- Low noise
- Moisture stable
- EIA color coded
- High quality performance at an economical price

1/2 Watt .4" long x .14" dia., 350 V working, 700 V overload

R-A(OHM)	Pkg/5	\$0.50
	Pkg/20	1.20
	Pkg/100	3.00
5 pieces of each value listed (save 10%)	R-AKIT	40.95

1 Watt .5" long x .14" dia., 500 V working, 1,000 V overload

R-B(OHM)	Pkg/5	\$0.85
	Pkg/20	2.40
	Pkg/100	8.80
5 pieces of each value listed (save 10%)	R-BKIT	69.62

**Carbon Composition Resistors**

Made by mixing carbon particles with a binder molded into a cylindrical shape, then baked. Resistance decreases as temperature increases. Resistance more prone to drifting than with other types. Available in $\frac{1}{2}$ watt ratings. Standard "classic resistor. 0.38" long x 0.41" diameter.

- $\pm 5\%$ tolerance
- $-55^\circ\text{C} \sim 125^\circ\text{C}$ operating range
- 350V working, 700V overload
- Low Inductance
- Low capacitance
- Better pulse endurance characteristics than film type resistors
- EIA color coded.

Below 1 meg ohm R-I(OHM)

Pkg/5	\$1.25	1 meg ohm and Above R-J(OHM)	Pkg/5	\$1.75
Pkg/20	4.00		Pkg/20	5.80
Pkg/100	12.50		Pkg/100	20.00
5 pieces of each value listed (2.2 to 8.2M, save 10%)	R-IJKIT	108.45		

1.0	30	390	2.7K	27K	330K
1.5	33	470	3.0K	33K	470K
2.0	39	510	3.3K	39K	680K
2.4	47	620	3.9K	47K	820K
2.7	51	680	4.3K	51K	1.0M
3.3	68	750	4.7K	56K	1.5M
4.7	82	820	5.1K	68K	2.0M
5.1	100	1.0K	5.6K	75K	3.0M
6.8	110	1.1K	6.2K	82K	4.7M
8.2	120	1.2K	6.8K	100K	6.8M
10	150	1.5K	7.5K	110K	8.2M
12	180	1.6K	8.2K	120K	
15	220	1.8K	10K	150K	
20	240	2.0K	15K	200K	
22	270	2.2K	20K	220K	
27	330	2.4K	22K	270K	

2.2	68	680	6.8K	82K	820K
2.7	82	750	7.5K	100K	1.0M
3.0	100	820	8.2K	110K	1.2M
3.9	110	1.0K	10K	120K	1.5M
4.7	120	1.1K	12K	150K	2.2M
5.1	150	1.2K	15K	200K	2.4M
6.8	180	1.5K	20K	220K	2.7M
8.2	220	1.8K	22K	240K	3.3M
10	240	2.2K	27K	270K	4.7M
12	270	2.4K	33K	330K	5.6M
15	330	2.7K	39K	390K	6.8M
20	360	3.3K	47K	470K	8.2M
27	390	3.6K	51K	510K	
36	470	4.7K	62K	620K	
47	510	5.1K	68K	680K	
51	620	6.2K	75K	750K	

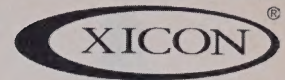
Metal Film Resistors

Consist of a resistive element of an extremely thin layer of metal alloy vacuum deposited on a substrate. Precise and quiet. Available in 1/2 watt ratings. 0.4" long x 0.14" diameter.

- ±1% tolerance
- -55° C ~ 155° C operating range
- 350V working, 700V overload
- Epoxy coated
- Nickel chromium ceramic substrate
- Alloy coated leads
- Welded end caps
- EIA color coded.

R-M(OHM)	pkg/5	\$0.85
	pkg/20	2.40
	pkg/100	6.90
5 pieces of each value listed (save 10%)	R-MKIT	53.55

10	120	680	5.1K	47K	240K
12	150	820	6.2K	51K	270K
15	180	1.0K	6.8K	62K	330K
20	220	1.1K	7.5K	68K	470K
27	240	1.2K	8.2K	75K	511K
36	270	1.5K	10K	82K	680K
47	330	2.2K	15K	100K	820K
51	360	2.4K	20K	110K	1.0M
68	390	2.7K	22K	120K	1.5M
82	470	3.3K	27K	150K	2.2M
100	510	3.9K	33K	200K	
110	620	4.7K	39K	220K	

**Metal Oxide Power Resistors**

Metal Oxide resistors are for applications where stability under high temperature conditions is required. Available in 1 and 2 watt ratings.

- ±5% tolerance
- -55° C ~ 240° C operating range (derated over 70° C)
- 350V working, 600V overload
- Excellent flame retardant coating
- Stable performance in diverse conditions
- High purity ceramic core
- EIA color coded.

1 Watt 0.47" long x 0.20" diameter

R-E(OHM)	pkg/5	\$0.90
	pkg/20	2.80
	pkg/100	10.50
5 pieces of each value listed (save 10%)	R-EKIT	68.85

2 Watt 0.63" long x 0.22" diameter

R-F(OHM)	pkg/5	\$1.10
	pkg/20	3.60
	pkg/100	12.00
5 pieces of each value listed (save 10%)	R-FKIT	84.15

0.47	27	270	1.8K	10K	120K
1.0	30	300	2.0K	12K	150K
2.0	39	330	2.2K	15K	200K
2.4	47	390	2.4K	20K	220K
2.7	51	470	2.7K	22K	270K
3.3	68	510	3.0K	24K	330K
4.7	82	560	3.3K	27K	470K
5.1	100	680	3.9K	30K	510K
6.8	110	750	4.3K	33K	680K
8.2	120	820	4.7K	47K	820K
10	150	1.0K	5.1K	51K	1.0M
12	180	1.1K	6.2K	68K	
15	200	1.2K	6.8K	75K	
20	220	1.5K	7.5K	82K	
22	240	1.6K	8.2K	100K	

**Power Resistors**

Wire wound resistors are made by wrapping a length of high resistance wire onto an insulating form. Metal oxide resistors are made by depositing tin oxide on the substrate, providing good stability. Ceramic flame retardant package. Exceptionally small, sturdy and reliable. Available in 5 watt and 10 watt ratings.

- ±5% tolerance
- -55° C ~ 155° C operating range (derated over 70° C)
- 350V working, 700V overload
- Excellent moisture resistance
- Stable performance in diverse conditions
- Sealed with special cement
- High temperature stability

5 Watt 0.86" long x 0.39" square

R-Q(OHM)	each	\$0.45
	pkg/10	4.00
10 Watt 1.93" long x 0.39" square		
R-R(OHM)	each	\$0.60
	pkg/10	5.00

	Wire Wound	Metal Oxide
5W	0.5-47	50-25K
10W	0.5-750	1.0K-25K

0.5	7.5	50	150	680	3.0K
1	8.2	68	200	750	4.7K
2	10	75	250	820	5.0K
3	15	82	300	1.0K	10K
4	20	100	360	1.5K	20K
5	30	110	400	2.0K	25K
6.8	47	120	500	2.7K	

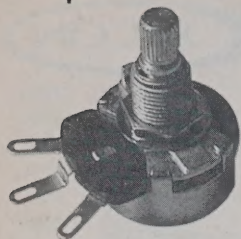
**Holco Resistors**

Precision 1/4 watt, 0.1% tolerance resistors, excellent for use in attenuators, solid state circuits. Not for use above 200 VDC. While Supplies Last.

R-H(OHM)	\$0.95 each.
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15	75	249	649	2490	8450
30.1	100	301	806	3480	15,000
34.8	121	348	845	4020	20,000
51.1	150	402	1000	5110	30,100
64.9	174	511	1210	6490	
71.5	200	604	1740	7500	

fax: 480.820.4643 OR 800.706.6789 (us & canada only)



NOS Potentiometers

Carbon composition surplus pots. $\pm 30\%$ of values shown. *Limited supply.*

Most shaft lengths are $\frac{3}{4}$ " long. **Call for specifics**

Part #	Value (ohms)	Taper	Shaft	Other	Price
R-V1K	1K	linear	¼" screwdriver	5 watt	\$2.99
R-V1K1	1K		¼" round	Mallory NIB, 5W	4.95
R-V1D5K1	1.5K	audio	¼" flat	switch	1.00
R-V2K-L-SW	2K	linear	¼" round	switch	1.00
R-V350	2K	audio	¼" round	switch	1.99
R-V5K2	5K	linear	⅛" flat	min.	.65
R-V5K3	5K	audio	¼" round	1W, switch	1.00
R-V15K	15K	linear	¼" flatted: ⅜" long	25W	4.95
R-V25K1	25K	linear	¼" round	switch	.95
R-V25K3	25K	audio	⅝" flatted shaft	min.	.95
R-V25K4	25K	audio	¼" dial	PC mount, switch	.95
R-V50KD4	50K	audio	¼" & ⅞"	dual control	.95
R-V50K1	50K		¼" screwdriver	Alps Brand	2.95
R-V500K2	500K	linear	¼" plastic knurled	pc mount	.50
R-V500K3	500K		¼" screwdriver	Allen Bradley	9.95
R-V500KD4	500K		¼" inner, ⅜" outer	dual	1.75
R-V2M	2M		.185" D shaft	Push-pull switch	1.50
R-V2MD	2M	linear	¼" inner, ⅜" outer	dual, tap, switch	1.75
R-V5M1	5M	linear	¼" plastic knurled	pc mount	.65

Clarostat Replacement Pots

"Pick-a-Shaft" controls take any shaft listed below. $15/16$ " dia. body with $3/8$ x 32 mounting bushing $3/8$ " long. All are linear taper.

Resistance Values:

1000, 5000, 25K, 10K, 50K

While Supplies Last

R-VA47-(ohm)	\$9.25
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Shaft for R-A47/R-A58 Pots:

Knurled Flatted 3"

R-VKFS-3	3.50
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Bag 'O Resistors

Refill your miscellaneous resistor drawer. A minimum of 100 assorted resistors, mostly NOS carbon composition. Due to age, values have drifted, so have your ohm meter ready!

R-BAGO	\$2.95
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Wirewound Pots

Clarostat 4 watt wirewound "Pick-a-Shaft" controls, 1²³/₃₂" dia. body with 3/8" x 32 mounting bushing. All are linear taper.

Resistance Values and Taper:

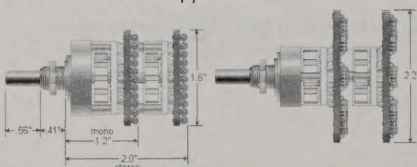
2000, 5000, 10,000

While Supplies Last

R-VA58-(ohm)	\$19.95
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Stepped Attenuators While Supplies Last



HT Series Type

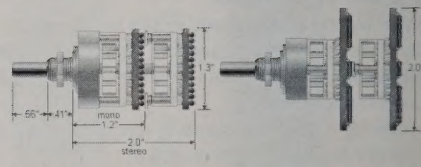
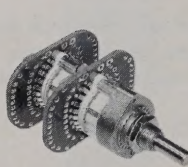
- Available fully assembled or in kit form
- 1% 1.2 watt, metal film resistors
- 10K, 25K, 50K, 100K available
- Rear Mounted
- Most Popular Type
- Easiest to Assemble as a kit

Mono:

Assembled	R-VATAM-value	\$72.80
Kit	R-VATKM-value	60.80
Switch Only	R-VATSM	56.00

Stereo:

Assembled	R-VATAS-value	\$133.60
Kit	R-VATKS-value	111.20
Switch Only	R-VATSS	101.60



Mini-V Series Type

- Available fully assembled or in kit form
- Smallest Size - Fits where most HT types won't
- 600 ohm, 10K, 25K, 50K, and 100K available
- Rear Mounted
- Also available with Holco 0.1% resistors (in kit form only - 25K, 50K, 100K)

Mono:

Assembled	R-VMINAM-value	\$72.80
Kit	R-VMINKMR-value	60.80

Mono With Holco Resistors:

Kit	R-VMINKMH-value	80.80
Switch Only	R-VMINSM	56.00

Stereo:

Assembled	R-VMINAS-value	\$133.60
Kit	R-VMINKSR-value	111.20

Mono With Holco Resistors:

Kit	R-VMINKSH-value	151.20
Switch Only	R-VMINSS	101.60

Alpha Pots

24mm carbon composition. 300° rotation. 1/2 watt, 500VDC rating for linear taper, 1/4 watt, 250VDC rating for audio taper. 1/4" dia. shaft. Solder lugs.

Single

Audio/Log

Value	Part #	Price
5K	R-VA5KA	\$1.75
10K	R-VA10KA	1.75
500K	R-VA500KA	1.75
1M	R-VA1MA	1.75

Linear

5K	R-VA5KL	1.75
10K	R-VA10KL	1.75
100K	R-VA100KL	1.75
250K	R-VA250KL	1.75

100K 1 1/2" shaft	R-VA100KLX	1.95
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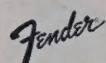
Dual

Audio/Log

Value	Part #	Price
10K	R-VA2X10KA	\$2.95
50K	R-VA2X50KA	2.95
100K	R-VA2X100KA	2.95
250K	R-VA2X250KA	2.95
500K	R-VA2X500KA	2.95
1M	R-VA2X1MA	2.95

Linear

50K	R-VA2X50KL	2.95
100K	R-VA2X100KL	2.95
250K	R-VA2X250KL	2.95
500K	R-VA2X500KL	2.95
1M	R-VA2X1ML	2.95



CTS Pots

CTS pots in Fender® replacement part packaging. Original replacement parts for many Fender® items.

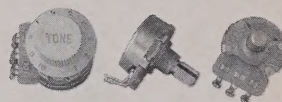
Value	Part #	Price
5K log	R-VCTS-5K-A	\$4.95
5K linear	R-VCTS-5K-L	4.95
10K log	R-VCTS-10K-A	4.95
25K linear	R-VCTS-25K-L	4.95
50K reverse log	R-VCTS-50K-RA	6.95
100K linear	R-VCTS-100K-L	4.95
500K log	R-VCTS-500K-A	4.95
3M reverse log	R-VCTS-3M-RA	5.95



Original Fender Pots

For most Stratocasters & Telecasters

Value	Part #	Price
250K ohm, Original TBX tone control	R-VTBX	\$9.95
250K ohm, Split Shaft	R-V250K-SP	4.50
250K ohm, Solid Shaft	R-V250K-SS	5.25



CTS Pots

1/2 watt, 3/8" mounting, 1/4" splined shaft for set screw or push on. For most US made amps,

Value	Part #	Price
250K log	R-VC250KA	\$3.95
500K log	R-VC500KA	3.95
1 meg log	R-VC1MA	3.95



Original Gibson Pots

For Gibson™ Guitars

Value	Part #	Price
300K ohm, Linear taper, Long shaft	R-V300-GIB	\$8.95
300K ohm, Linear taper, Short shaft	R-V310-GIB	8.95
500K ohm, Audio taper, Long shaft	R-V500-GIB	8.95
500K ohm, Linear taper, Short/Long shaft	R-V510-GIB	8.95
500K ohm, Audio taper, Push-pull, Short shaft	R-V520-GIB	11.95



fax: 480.820.4643 OR 800.706.6789 (us & canada only)

42 Reverb tanks accutronics



World famous Accutronics brand reverb tanks in 3 of the most popular styles with 14 models to choose from. Get the warm, true sound that only spring reverberation can provide. Used in Fender®, Marshall™, Ampeg, Peavey, Music Man, SLM and Other Amps



The industry standard for years, the Type 4 is still manufactured using the original Hammond design. Four counter wound and coupled springs deliver superior mechanical performance and the classic sound that helped make the Fender Twin Reverb amps famous. 16 3/4" long x 4 3/8" wide.

4AB3C1B	8 ohm input, 2,250 ohm output, long delay, insulated input, grounded output connectors, horizontal, open side down mounting.	P-R4AB3C1B	\$20.95
4BB2A1B	150 ohm input, 2,250 ohm output, medium delay, grounded input, grounded output connectors, horizontal, open side down mounting.	P-R4BB2A1B	20.95
4BB3C1B	150 ohm input, 2,250 ohm output, long delay, insulated input, grounded output connectors, horizontal, open side down mounting.	P-R4BB3C1B	20.95
4EB2C1B	600 ohm input, 2,250 ohm output, medium delay, insulated input, grounded output connectors, horizontal, open side down mounting.	P-R4EB2C1B	20.95
4FB3A1B	1,475 ohm input, 2,250 ohm output, long delay, grounded input, grounded output connectors, horizontal, open side down mounting.	P-R4FB3A1B	20.95
4FB3D1B	1,475 ohm input, 2,250 ohm output, long delay, insulated input, insulated output connectors, horizontal, open side down mounting.	P-R4FB3D1B	20.95

Designed for applications in which overall sound quality is important and a compact package is required. Small in size, this three string reverb approach has the rich textural quality of larger reverb units. 9 1/4" long x 3 1/8" wide.

8AB2A1B	10 ohm input, 2,575 ohm output, medium delay, grounded input, grounded output connectors, horizontal, open side down mounting.	P-R8AB2A1B	\$19.95
8BB2A1B	190 ohm input, 2,575 ohm output, medium delay, grounded input, grounded output connectors, horizontal, open side down mounting.	P-R8BB2A1B	19.95
8DB2C1D	310 ohm input, 2,575 ohm output, medium delay, insulated input, grounded output connectors, vertical connector down mounting.	P-R8DB2C1D	19.95
8EB2C1B	800 ohm input, 2,575 ohm output, medium delay, insulated input, grounded output connectors, horizontal, open side down mounting.	P-R8EB2C1B	19.95

Six springs, counter-wound, coupled and placed in parallel combine to create the fullest, richest reverb effect throughout the full range of musical sound. Ideally suited for keyboard, sound reinforcement and pedal steel applications. 16 3/4" long x 4 3/8" wide.

9AB2A1B	10 ohm input, 2,575 ohm output, medium delay, grounded input, grounded output connectors, horizontal, open side down mounting.	P-R9AB2A1B	\$22.95
9AB2C1B	10 ohm input, 2,575 ohm output, medium delay, insulated input, grounded output connectors, horizontal, open side down mounting.	P-R9AB2C1B	22.95
9AB3C1B	10 ohm input, 2,575 ohm output, long delay, insulated input, grounded output connectors, horizontal, open side down mounting.	P-R9AB3C1B	22.95
9FB2A1C	1,928 ohm input, 2,575 ohm output, medium delay, grounded input, grounded output connectors, vertical connector up mounting.	P-R9FB2A1C	22.95
9EB2C1B	800 ohm input, 2,575 ohm output, medium delay, insulated input, grounded output connectors, horizontal, open side down mounting.	P-R9EB2C1B	22.95

Belton Reverb Tanks

Used in Hughes&Kettner, Marshall™, Ampeg, Crate, Fender®, Mesa Boogie, Guytron, Rocktron, DOD, Summit Audio, and Smokey, to list a few!

BL3AB3C1B	Equivalent to the 9AB3C1B	P-RBL3AB3C1B	\$19.95
BL2AB3C1B	Equivalent to the 4AB3C1B	P-RBL2AB3C1B	18.50

Reverb Tank Bags

Handmade Single-ply black Tolex reverb tank bags. Replacement for Fender® and other amps

Fits 17" tanks	P-RBAG-17	\$8.95
Fits 9" tanks	P-RBAG-9	7.95

Right Angle RCA Cables

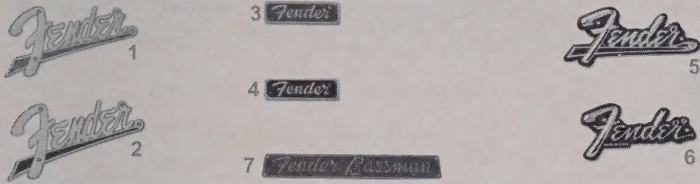
For reverb tanks and other electronic devices.

3 foot cable	S-H273	\$1.95
6 foot cable	S-H276	2.25

Fender® Logos

Replacement for Fender® Amps, mounting screws included.

Flat Brown ¹	S-M911	\$14.95
Flat Black ²	S-M916	14.95
Tweed Brown ³	S-M913	10.95
Tweed Black ⁴	S-M917	10.95
Blackface with Tail ⁵	S-M912	14.95
'70's Small Logo (CBS) ⁶	S-M915	11.95
Tweed Bassman ⁸⁷	S-M914	11.95



Speaker Grills

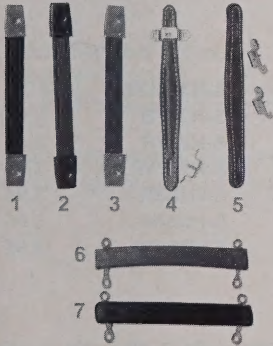
Metal grills have flat black finish with rubber edge trim. Mounting brackets are sold separately.

8"	P-HSG008	\$3.95
10"	P-HSG010	4.95
12"	P-HSG012	5.95
15"	P-HSG015	6.95
Mounting Bracket	P-HSGA1	.50 ea

Fender® Tilt Back Legs

Available in three sizes. Contains two in each pack.

3" small	P-H265S	\$24.95
4" medium	P-H265M	28.95
5" large	P-H265L	35.95



Replacement Handles

High quality replacement handles for vintage Fender® amps. Will work on other amplifiers as well. Includes mounts and screws.

Description	Center to Center	Part #	Price
Black strap with silver caps ¹	8 3/4"	P-H261	\$5.95
Black strap with black caps ²	8 3/4"	P-H261B	5.95
Brown strap with caps ³	8 3/4"	P-H260	5.95
Brown leather-raised ⁴	6 1/2"	P-H262	7.95
Brown leather-flat ⁵	6 1/2"	P-H263	7.95
Original Fender® brown molded dogbone ⁶		P-H269BR	14.95
Original Fender® black molded dogbone ⁷		P-H269BK	14.95

Cabinet Corners/Feet

Original Fender® Sphinx Glides. Package of 4.¹

Large tapered rubber foot with zinc washer. 1" dia. Screw not included. Package of 4.²

Industry standard 3-leg back side corner cover for vinyl or carpet covered cabinets. 18 gauge steel.³

2-leg corner. Use where total material thickness is 1/2" or more. Works on carpet or vinyl. 18 gauge steel.⁴

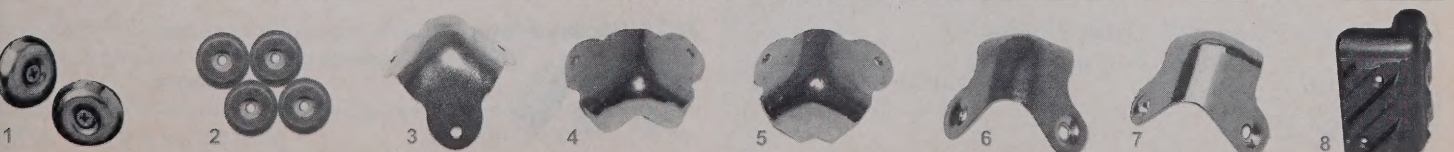
Corner wraps around inside edge of cabinet. Works on 3/4" of wood + material thickness. 18 gauge steel.⁵

Corner wraps around inside edge of cabinet. Works on 3/4" of wood + material thickness. Countersunk mount holes. 20 gauge steel.⁶

Chrome with lip, as used on Fender®. Sold individually.⁷

Plastic, small stacking chevron corner. Ideal for carpet covered cabinets. Approx. 2 1/8" high, sides are 1" wide. W⁸

Heavy duty plastic, large stacking chevron corner. Ideal for carpet covered cabinets. Approx. 3 1/4" high, sides are 2" wide.⁸



Jewels

Replacement for Fender® Amps

Red	P-L115	\$2.25
Green	P-L116	2.25
Amber	P-L117	2.25
Blue	P-L120	2.25
Purple	P-L121	2.25
Clear	P-L122	2.25
White	P-L123	2.25
Pilot Lamp Holder	P-L124	2.25

Light Bulb

Replacement for Fender®. Package of 10.
#47 light bulb



P-47 \$3.50

Guitar Amp Castors

Heavy duty swivel castor for use on Fender® and other amps. 2" diameter wheel supports 44 lbs. Comes with or without socket.



Castor & Socket	P-HW01S	\$5.50
Save 10% on the set of 4 Castors and Sockets		19.80
Castor only	P-HW02	3.95
Socket only	P-HW03	1.95

Fender® Chassis Straps

Available in three sizes. Contains two in each pack.

3" small	P-H264S	\$7.95
4" medium	P-H264M	7.95
5" large	P-H264L	8.50

fax: 480.820.4643 OR 800.706.6789 (us & canada only)

44 Jacks Plugs

1/4" Cliff Jacks

Highest Quality, made in England

Mono input jack. 4 solder terminals, switched. Metal ferrule, vintage style. Used in British amps

S-H501 \$2.75

Mono input jack. 4 solder terminals, switched. Used in modern Marshall™ amps with black plastic nut

S-H502 2.25

Mono input jack. 4 PC board terminals, switched. Used in modern Marshall™ amps, or as replacement part for Marshall™ JCM 900 cabinets. Used in Ampeg, Crate, Marshall™ & more

S-H503 2.25

Stereo input jack. 6 PC board terminals, switched. Used in modern Marshall™ amps. Used in many PA & Recording consoles, Marshall™ bass heads, & "rack" units

S-H504 2.25

Same as S-H504 but with 6 solder lugs

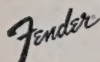
S-H505 2.45

Hex nut for S-H502, S-H503, S-H504 and S-H505

S-H5NT .45



S-H501 S-H502 S-H503 S-H504 S-H505



1/4" Jacks

Fender® PC mount jack. Mono 4 pin. circa 1988 to 1999

S-H506 \$3.50

Fender® PC mount jack. Stereo 9 pin. circa 1988 to 1999

S-H507 4.50

Fender® R/A stereo jack 1999 to present

S-H508 2.25

Fender® R/A mono jack 1999 to present

S-H509 2.25

Fender® Hex nuts for Rean jacks. Package of 12

S-H510 2.25



Switchcraft Jacks

1/4" Female. Open circuit. Replacement for Fender®

W-SC-11 \$2.95

1/4" female. Shorting type

W-SC-12A 2.95

1/4" female. Stereo Double Open Circuit

W-SC-12B 3.10

1/4" female Same as W-SC-12A but has longer leads

W-SC-L12A 3.20

RCA panel mount female jack. Good Fender® replacement

W-SC-3501FR 3.45



S-H33-097

S-H33-099

1/4" Panel Mount Phone Jacks

3 conductor, stereo. Double open circuit. Generic, like Switchcraft 12B

S-H33-099 \$1.50

2 conductor, shorting type. Generic, like Switchcraft 12A

S-H33-097 1.50



rear mount



front mount

RCA Phono Jacks

Female chassis mount jacks. Gold connections provide optimum performance.

Nickel (While supplies last) pkg./2

S-H30-528 \$1.75

Gold, black band, front mount. Sold individually

S-H267B 3.95

Gold, red band, front mount. Sold individually

S-H267R 3.95

Gold, white band, front mount. Sold individually

S-H267W 3.95

Gold, black band, rear mount. Sold individually

S-H268B 3.95

Gold, red band, rear mount. Sold individually

S-H268R 3.95

Gold, white band, rear mount. Sold individually

S-H268W 3.95

RCA Phono Plugs

Male plug to match with above jacks. Ceramic body with Gold Plating. Available with red or black color band.

Red

S-H331R \$1.95

Black

S-H331B 1.95



Switchcraft Plugs

RCA Plug. For Fender®

W-SC-3502A \$2.75

1/4" Right angle plug. For Fender®

W-SC-228 3.95



RCA Phono Plugs with Cable Holder

Aluminum, package of 3.

S-H304

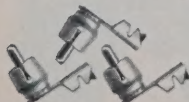
\$0.25

RCA Phono Plugs

Aluminum, package of 25.

S-H306

\$1.25



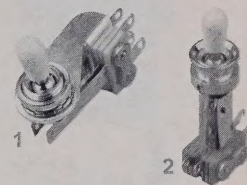
Switches

Black standby rocker switch for Marshall™ JCM series and others ¹	P-H490	\$4.95
Lighted power switch. Used for Marshall™ JCM series and others ¹	P-H491	6.95
Carling SPST toggle power and standby switch. Good Fender® replacement ²	P-H495	4.95
Carling SPDT 2 position toggle. Great Fender® ground switch replacement ²	P-H494	5.95
Carling SPDT 3 position center off toggle. Great Fender® ground switch replacement ²	P-H496	4.95
Carling SPST footswitch. Used in Fender®, etc. reverb/tremolo/channel switching pedals ³	P-H493	6.25
Carling DPDT footswitch, used in switching and effects units ⁴	P-H497	9.95
DPDT footswitch, same switch as P-H497 but made in Taiwan ⁵	P-H498	4.95



Gibson Guitar Switches

Original, L-type with cream cap ¹	P-SW01	\$13.95
Original, Straight type with cream cap ²	P-SW02	13.95
Original, Switch cap, toggle, black	P-SW03	2.95
Original, Switch cap, toggle, white	P-SW04	2.95
Original, Switch cap, toggle, vintage amber	P-SW05	3.75
Original, Switch cap, 5 position, black	P-SW06	2.75



Fender Guitar Switches

Whether you need to replace a worn switch or just want to add a little tonal variety to your favorite instrument, Fender® offers high quality, American made switches with knobs and mounting hardware.

3 way pickup selector used on American vintage Strats & Teles. ¹	P-SW50	\$7.50
5 way pickup selector used on most American made Stratocasters. ²	P-SW51	7.50



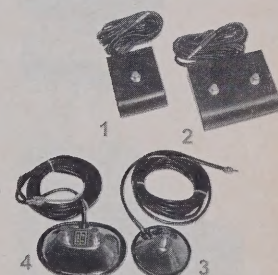
Optocouplers

Vibrato LDR for Fender® Amps	R-VOP1020	\$14.95
VacTec. For channel switching.	R-VTL5C1	7.95
VacTec dual element	R-VTL5C32	8.95



Foot Switch Boxes

Marshall™ one button with 1/4" plug ¹	P-H470	\$16.95
Marshall™ two button with 1/4" plugs ²	P-H471	21.95
Fender® one button, vintage style with RCA plug ³	P-H270	35.99
Fender® two button, vintage style with RCA plugs ⁴	P-H271	42.99



Bias King™ & Bias King Pro™

A digital readout for real world analog measurements.
As tubes age, their bias point will shift. By using the Bias King™, you can maintain the sound you want by periodically adjusting the bias on your amp. This will keep your tubes in top shape throughout their life and will keep your amp sounding its best. Use the chart provided to find out what range of current flow is acceptable for the tube type in your amp. It works on most octal socket tube amps, and requires no power source other than the amp it is plugged in to. It can be used to "match" tubes into pairs. Two models are available:

Bias King™ Features one tube socket enabling you to check the bias of your tubes one tube at a time. **S-TBKING \$115.00**

Bias King Pro™ Two sockets allow you to switch between two tube readouts without having to unplug tubes. **S-TBKINGPRO 175.00**



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Pickups

Gibson Guitars was the true pioneer of electric guitar pickups. They invented the first humbucking guitar pickups and their "Patent-Applied For" pickups are still considered the most sought-after pickups in the world. Their quality and attention to detail makes Gibson the true measure of your guitar sound.

Description**Part #** **Price**

A neck or bridge position vintage sounding "Patent Applied For" humbucker. Great variety of tonal possibilities with emphasis on on high and low end.

57 Classic, Humbucker, Gold cover

P-PUG1 **\$97.50**

57 Classic, Humbucker, Nickel cover

P-PUG2 **94.50**

A neck or bridge position vintage humbucker with more output than the '57 Classic. Great clean sound that can produce crunchy rhythms and high gain leads that are enhanced by the extra distortion that this pickup can generate.

57 Classic Plus, Humbucker, Gold cover

P-PUG3 **99.95**

57 Classic Plus, Humbucker, Nickel cover

P-PUG4 **99.95**

A neck position "modern" vintage humbucker. The tonal characteristics provide a combination of rich, full lows and increased treble clarity.

490R Modern Classic, Humbucker, Chrome cover neck

P-PUG5 **77.50**

490R Modern Classic, Humbucker, Double black neck

P-PUG6 **70.95**

490R Modern Classic, Humbucker, Gold cover neck

P-PUG7 **80.95**

490R Modern Classic, Humbucker, Nickel cover neck

P-PUG8 **77.50**

A bridge position "modern" vintage humbucker. The tonal characteristics provide a wide range of possibilities, from great clean rhythms to fat and nasty leads.

490T Modern Classic, Humbucker, Chrome cover bridge

P-PUG9 **77.50**

490T Modern Classic, Humbucker, Double black bridge

P-PUG10 **70.95**

490T Modern Classic, Humbucker, Gold cover bridge

P-PUG11 **80.95**

490T Modern Classic, Humbucker, Nickel cover bridge

P-PUG12 **77.50**

A single coil soap bar style pickup, and a true Gibson innovation that lives on! The P-90 has a raspy, fat tone with an emphasized midrange punch. It is a rock & roll pickup that has a very unique personality among other pickups.

P-90 Single Coil, Single coil, Black soapbar cover

P-PUG13 **67.50**

P-90 Single Coil, Single coil, Black dogear cover

P-PUG14 **67.50****Lace-Sensors**

Low noise and high output for incredible response and sustain. Each color represents a different sound: Gold is the classic Vintage Strat sound with glassy bell like tones. Blue is warm and loud like an old 50's humbucker. Each comes with a white cover.

Description**Part #** **Price**

Gold

P-PUF56 **\$46.95**

Blue

P-PUF57 **60.95****Stratocaster****Description****Part #** **Price**

Texas Special Strat Set of 3 - Bridge, Middle, Neck

Overwound, calibrated, vintage style Stratocaster pickups with plenty of midrange chirp, crystal highs and tight bass. AlNiCo 5 magnets and enamel coated magnet wire create the increased output that demands respect!

P-PUF50 **\$128.50**

Vintage Noiseless Set of 3 - Bridge, Middle, Neck

Special beveled edge AlNiCo 5 magnets and enamel-coated magnet wire produce the brilliant clarity, definition and harmonic attributes of a vintage Strat in a "noiseless" package. Each Vintage "Noiseless" Strat pickup comes with 3 pots, a capacitor and resistor to enhance your "Noiseless" experience.

P-PUF51 **142.50**

'57/'62 Strat Single Coil DC Resistance: 5.6K Inductance: 3.0 Henries

P-PUF52 **35.95****Telecaster****Description****Part #** **Price**

Texas Tele Bridge/Neck DC Resistance: 10.5K Inductance: 3.95 Henries

P-PUF53 **\$92.50**

These overwound Tele pickups are constructed with AlNiCo 5 magnets and enamel coated magnet wire. The bridge pickup features height staggered magnets and a copper plated steel bottom plate for increased output, presence and midrange, while the nickel-silver cover on the neck pickup produces a clear warm tone that only a true Custom Shop Tele pickup can do.

Original Tele Neck: DC Resistance: 7.7K Inductance: 2.45 Henries

P-PUF54 **35.95**

Original Tele Bridge DC Resistance: 7.2K Inductance: 3.27 Henries

P-PUF55 **35.95**

Pro Rat 2

The world renowned premier distortion device with the unique Rat tone. Smooth continuously variable controls for distortion amount, filter cutoff and volume level. Mechanical switch and LED status indicator. Glow in the dark graphics on an indestructible steel enclosure.

M-RAT2 \$64.95

**Pro Vintage Rat**

This is the one that started it all! The tone known world-wide as the standard for distortion devices. Smooth continuously variable controls for distortion amount, filter cutoff and volume level. Mechanical switch. Original circuitry and original indestructible steel enclosure.

M-VRAT \$98.95

**Pro Turbo Rat**

The crunchiest of all the Rats, with a maximum output of 22.8v (p-p). Smooth continuously variable controls for distortion amount, filter cutoff and volume level. Mechanical switch and LED status indicator. Unique Turbo-Rat graphics on an indestructible steel enclosure.

M-TRAT \$74.95

**Pro Rat Battery Eliminator**

Works on all Rats.

M-RPS1 \$16.95

Guyatone OD-2 Overdrive

Let's face it, some of us are beyond redemption. For the sinner in us all, the OD-2 will add a little gravel to the trip down the highway to Hell. Based on a popular vintage circuit, the OD-2 offers up smooth, warm overdrive in the classic Tubescreamer tradition. Level and drive controls adjust the degree of overdrive from subtle clipping to a fully saturated snarl. Devilishly delightful!

M-OD2 \$69.95

**Guyatone VT-3 Vintage Tremolo**

As we enter a new millennium, it is wise to look to the past for answers. The VT-3 does just that, offering all the tight, choppy tones that defined the classic tremolo sounds of bygone years. Intensity and speed controls offer everything from painfully slow pulses to light-speed, shimmering stabs- without the hassle of lugging around a vintage amp. Essential!

M-VT3 \$69.95

**Guyatone WR-2 Wah Rocker**

The secret weapon of countless pros, the WR-2 is finally available to the masses! An envelope controlled filter of surpassing hipness, the Wah Rocker's variable Threshold and Decay controls can produce everything from synth-like filter sweeps to the raucous squawk of a half-cocked wah pedal. Pound for pound, it's the funkiest filter that money can buy! *Used by TM Stevens.*

M-WR2 \$66.95

**Maxon OD808 Overdrive**

The Original Overdrive! The OD808 is often imitated but never matched! Identical to the 1970's circuit and featuring the JRC4558 IC chip, it offers warm, smooth, transparent overdrive that'll make your rig scream! The OD808's dynamically responsive circuitry reacts precisely to individual playing styles, letting the true voice of any instrument or artist shine through. Don't settle for copies when you can have the original!

M-OD808 \$139.95

**Maxon CP101 Compressor**

Provides clean, smooth compression with low noise. Unlike other compressors, the CP101 doesn't alter an instrument's attack characteristics, providing a more natural response. The CP101 can be used to increase an instrument's sustain or to limit signal peaks for a smooth, even output. The CP101 works perfectly with bass guitar, electric guitar or semi-acoustic guitar.

M-CP101 \$135.95



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Gibson Strings

For Gibson Electric Guitars

Description	Part #	Price
Brite Wires NPS Wound .008-.038	S-S700SUL	\$4.35
Brite Wires NPS wound .009-.042	S-S700UL	4.35
Brite Wires NPS wound .009-.046	S-S700ULMC	4.35
Brite Wires NPS wound .010-.046	S-S700L	4.35
Brite Wires NPS wound .011-.050	S-S700ML	4.35
Vintage Re-Issue Pure Nickel .009-.042	S-SVR9	5.25
Vintage Re-Issue Pure Nickel .010-.046	S-SVR10	5.25
Vintage Re-Issue Pure Nickel .011-.050	S-SVR11	5.25
Les Paul Pure Nickel .008-.038	S-SLP8	5.85
Les Paul Pure Nickel .009-.042	S-SLP9	5.85
Les Paul Pure Nickel .010-.046	S-SLP10	5.85



Fender Strings

Original 150's: If you're trying to capture the original vintage tone of pure nickel wound strings, string up a set of Original 150's! They are pure Fender tone through and through. Ball End.

Description	Part #	Price
.008-.038	S-S150SL	\$3.15
.009-.040	S-S150XL	3.15
.009-.042	S-S150L	3.15
.010-.038	S-S150	3.15
.010-.046	S-S150R	3.15
.011-.049	S-S150M	3.15

Original 250's: The "high-octane" nickel plated steel string for your electric guitar. With a pure steel wrap, the magnets in your pickups use the whole string, not just the core, and transform the energy into high output bursts of sound. The nickel plating enhances feel while reducing "string squeak" and fret wear without compromising tone. Original equipment on all U.S. made Fender electric guitars. Ball End.

Description	Part #	Price
.008-.038	S-S250SL	\$3.15
.009-.040	S-S250XL	3.15
.009-.042	S-S250L	3.15
.010-.038	S-S250	3.15
.010-.046	S-S250R	3.15
.011-.049	S-S250M	3.15



Gibson Guitar Picks

Sold by the dozen

Description	Part #	Price
Original, Jazz style, Heavy	S-P50H	\$2.75
Original, Jazz style, Medium	S-P50M	2.65
Original, Jazz style, Thin	S-P50T	1.95
Original, Standard style, Heavy	S-P74H	3.25
Original, Standard style, Medium	S-P74M	2.25
Original, Standard style, Thin	S-P74T	1.95



Fender Guitar Picks

Sold by the Dozen

Description	Part #	Price
Original, Standard, White, Thin	S-P351WT	\$2.95
Original, Standard, White, Medium	S-P351WM	2.95
Original, Standard, White, Heavy	S-P351WH	2.95
Original, Standard, Black, Thin	S-P351BT	\$2.95
Original, Standard, Black, Medium	S-P351BM	2.95
Original, Standard, Black, Heavy	S-P351BH	2.95



Fender Tuner

Original, AX-12 Auto, Chromatic Tuner	S-AX-12	\$36.95
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Pick Pockets

Attach *Pick Pockets*® genuine leather guitar pick *Keepers*® to the shoulder strap peg of each and every one of your guitars (logo outward). Insert your favorite flat guitar picks. *Pick Pockets*® are so simple to use they are revolutionary.

G-846 \$3.50

Total \$_____

ORDERING INFORMATION

Phone orders are accepted from 8:00 AM to 5:00 PM (MST) Monday through Friday and 9:00 AM to 1:00 PM Saturday. (Saturday hours are subject to change, refer to our website or call for current Saturday hours). We accept MasterCard, Visa, Discover, and American Express. Please give us the name listed on the card, the complete card number and the expiration date, either by phone, fax, e-mail or mail. You may also mail a check or money order with your order. We can ship COD **by UPS only**. There is an additional \$6.50 COD fee for orders shipping UPS COD service. **All orders shipping COD require payment by cashier's check or money order unless payment by check has been arranged with us in advance. NOTE: Cash is no longer accepted by UPS on COD as a matter of UPS policy.**

Fax and e-mail orders are accepted at anytime 24 hours a day. Unless specifically requested, these orders will be filled and shipped **without acknowledgment**. Our domestic toll free fax number is (800) 706-6789. Our website address is www.tubesandmore.com. Our e-mail address is info@tubesandmore.com.

Our handling fee is \$2.50 on each order. This handling fee is waived for all **book only** orders of \$20.00 or more. We do our best to accommodate add-ons to orders; however, we charge an additional handling fee for add-ons and cannot guarantee it will be added to the original order. The customer assumes all responsibility for additional shipping charges if the add-on ships separately.

Due to the nature of the types of products we supply, **all prices and availability are subject to change.**

If you have ordered from us before, please identify yourself by your customer code for faster service (all e-mail customers, please provide your personal password along with your customer code).

DOMESTIC ORDERS

We ship continental United States orders by UPS ground service unless otherwise requested. Orders shipping to Hawaii, Alaska, and Puerto Rico can only be sent by priority mail or by UPS priority service (2nd Day or Next Day). For shipping charges, instructions, and approximate delivery times, please see the chart in the back of the catalog. There is a \$10.00 minimum per order.

For domestic shipments, UPS Next Day Air, 2nd Day Air, 3 Day Select and other types of priority delivery are available upon request. These orders will be shipped the same day they are received **if phoned, faxed or e-mailed by noon (MST)**.

INTERNATIONAL ORDERS

We ship international orders by either Air Parcel Post or Surface Parcel Post, unless other services are requested. We ship by Air Mail to Canada unless you specify otherwise at the time of your order. We recommend UPS as our primary carrier for express services. Please specify which mode of shipment you prefer.

Payment must be made in US funds, either by credit card, bank draft or International Money Order. Wire transfers can be accepted for a \$40.00 fee. We cannot ship COD outside the United States. There is a \$25.00 minimum order.

If possible, please provide us with either your phone, fax or e-mail information.

OUT-OF-STOCK ITEMS

While we endeavor to stock what we catalog, we carry many obsolete, hard-to-find and custom manufactured items, and we cannot guarantee availability. If an ordered item is not in stock and we expect to have it again, it will be back ordered and so noted on your invoice unless otherwise requested. It will be invoiced and shipped when it becomes available. Shipping/handling charges will be adjusted so that you are not penalized by the additional cost of making two shipments. If an item is ordered that cannot be back ordered (i.e. most tube stock), or we cannot insure availability, it will be canceled from the order and so noted on the invoice. If an item has -NLA- (no longer available) in the description it means we cannot locate the item and are no longer able to provide it. If -NCA- (not currently available) appears in the description it means we are looking for the item and you may be able to order it in the future.

MERCHANDISE RETURNS

Should it become necessary to return merchandise for exchange or credit please see our guarantee on page one of the catalog. Please write, fax, e-mail or call with a reason for the return and you will be given a Return Authorization (RA). **Customer service is available by phone from 8am-10am and 2pm-4pm, Mon.-Fri.** All returns should be sent promptly; all returns must be received by us within 30 days or the RA will become invalid. The RA number must be placed on the outside of the package being returned in order to assure that your return is handled in a timely manner. We reserve the right to charge a restock fee where no evidence of product failure exists.

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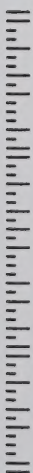
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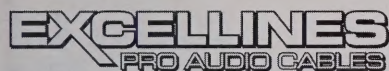
• Print part numbers and product description clearly. *Thank you for your order.*



Cable With Straight Phone Plugs

ProCo cable is the world renown industry standard. The Excellines cable are the musician's choice when it comes to guitar cable made with G&H 1/4" BigFoot straight phone plug to 1/4" BigFoot straight phone plug.

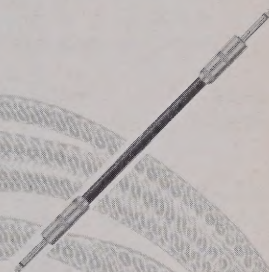
Length	Part #	Price
1 foot	P-HEG1	\$5.45
2 feet	P-HEG2	5.75
3 feet	P-HEG3	5.95
5 feet	P-HEG5	6.30
10 feet	P-HEG10	7.55
15 feet	P-HEG15	8.80
18.5 feet	P-HEG186	9.60
25 feet	P-HEG25	11.35
30 feet	P-HEG30	12.60



16 AWG cables 1/4" phone plug to 1/4" phone plug

Excellines 16 AWG two conductor portable speaker wire with G&H 1/4" phone plug to 1/4" phone plug.

Length	Part #	Price
3 feet	P-HSG16-3	\$7.40
6 feet	P-HSG16-6	7.70
10 feet	P-HSG16-10	8.90
25 feet	P-HSG16-25	13.50



Fender® Guitar Cables

Vintage Voltage Cables provide a quality tone and vintage look to any player's rig at an affordable price. Each cable is constructed of gold tipped plugs, oxygen-free copper wire, braided copper shielding, and heavy duty shrink wrapped ends. They are wrapped with either tweed, black & silver, wheat or oxblood woven exteriors for that Fender vibe. Combined with Fender's limited Lifetime Warranty, you've got a cable you can't live without!

Description	Part #	Price
10 foot Tweed	P-H272	\$14.95
18 foot Tweed	P-H273	16.95
10 foot Black/Silver	P-H274	14.95
18 foot Black/Silver	P-H275	16.95
10 foot Brown/Wheat	P-H276	14.95
18 foot Brown/Wheat	P-H277	16.95
10 foot Brown/Oxblood	P-H278	14.95
18 foot Brown/Oxblood	P-H279	16.95



TheSilencer

(Yes, it's spelled correctly!) This little "electronic safety pin" mutes the unpleasant and potentially harmful sound produced when you unplug a cable from an instrument while the power is still on. Constructed of Nitanium, a lightweight and extremely durable metal used in aeronautical and medical applications, TheSilencer is electronic in that it pulls the signal to ground, but it is mechanical in its operation. TheSilencer attaches to the instrument end of a .25" cable either by gripping it or via the double-sided adhesive strips provided.

NOTE: Not for use on speaker cables as it will cause the speaker to explode! ONLY for use on the instrument end of audio cables and as a connection to line or low level instruments.

P-H268

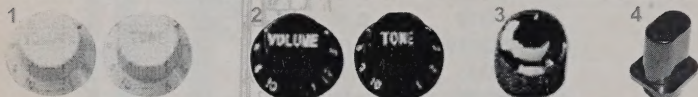
\$7.75



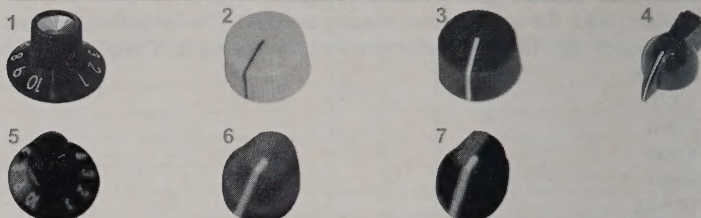
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Fender® Guitar Knobs

Description	Part #	Price
Original for Strat, 1 volume, 2 tone, white ¹	P-K330	\$5.25
Original for Strat, 1 volume, 2 tone, black ²	P-K331	5.25
Original for Tele, Chrome Dome, package of 2 ³	P-K332	14.95
Original Tele Switch, Switch Tip, package of 2 ⁴	P-K333	3.95

**Fender® Amp Knobs**

Description	Part #	Price
Skirted, 1-10, package of 6 ¹	P-K314	\$18.95
White Vintage, package of 6 ²	P-K315	17.95
Brown Vintage, package of 6 ³	P-K316	17.95
Chicken head, black, package of 6 ⁴	P-K318	10.95
Skirted Roc Pro, black, package of 6 ⁵	P-K319	8.95
Red Pointer, package of 6 ⁶	P-K320	8.95
Black Pointer, package of 6 ⁷	P-K321	8.95

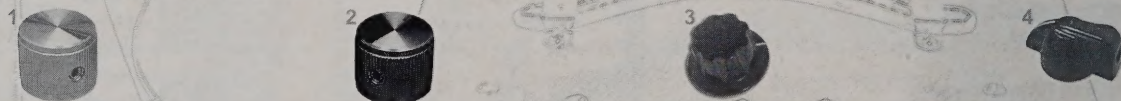
**Gibson Guitar Knobs**

Description	Part #	Price
Original Speed type, black, package of 4 ¹	P-K500	\$11.95
Original Speed type, gold, package of 4 ²	P-K501	11.95
Original Top Hat type, black, package of 4 ³	P-K502	11.95
Original Top Hat type, gold, package of 4 ⁴	P-K503	11.95
Original Top Hat type, vintage amber, package of 4 ⁴	P-K504	11.95
Original Speed type, black with silver metal insert, 2 volume, 2 tone ⁵	P-K505	11.95
Original Speed type, black w/gold metal insert, 2 volume, 2 tone ⁵	P-K506	11.95
Original Speed type, gold w/gold metal insert, 2 volume, 2 tone ⁶	P-K507	11.95

**Generic Knobs**

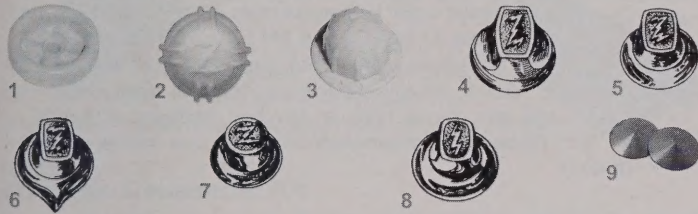
Sold individually.

Description	Part #	Price
Knurled aluminum, positive grip, notched tip indicator, fits 1/4" shaft with set screw, 3/4" dia. ¹	P-K310	\$3.25
Knurled aluminum, positive grip, notched tip indicator, fits 1/4" shaft with set screw, 1" dia. ¹	P-K312	4.50
Knurled Black aluminum, positive grip, notched tip indicator, fits 1/4" shaft with set screw, 3/4" dia. ²	P-K311	3.25
Knurled Black aluminum, positive grip, notched tip indicator, fits 1/4" shaft with set screw, 1" dia. ²	P-K313	4.50
NOS generic knob. Fits 1/4" knurled shaft, 1 1/8" dia, black, good for amps, kits etc. ³	P-K986	2.95
Generic chicken head knob, black, (see Fender knob # P-K318) ⁴	P-K307	.99



Reproduction Molded Plastic Knobs

Zenith	Part #	Price
1 1/4" diameter shaft. Ivory, tuning knob ¹	P-K189	\$5.75
1" diameter, 1/8" shaft. Ivory ²	P-K190	5.75
1" diameter, 1/4" split shaft rounded top. Ivory ³	P-K192	5.75
1 3/8" diameter, 1/4" diameter shaft. Walnut finish ⁴	P-K193	7.50
1 1/8" diameter, 1/4" diameter shaft. Walnut finish. No set screw ⁵	P-K194	6.75
1 1/8" diameter, with pointer, 1 1/4" diameter shaft. Walnut finish ⁶	P-K195	6.75
1 1/8" diameter, 1/4" diameter shaft. Walnut finish ⁷	P-K196	7.10
1 3/8" diameter, 1/4" diameter shaft. Walnut finish ⁸	P-K204	7.10
Transoceanic Brights. For H 500 & 600 series, 5/8" diameter. pkg of 2 ⁹	P-K985	5.95

**Zenith Bandswitches**

Used in Zenith radios in the late 30's and early 40's. 1938 model used lever with set screw in 3:00 position, 1939 model and 1940 models used lever with set screw in 12:00 position.

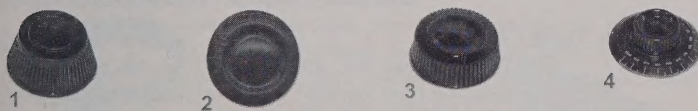
Set screw in 3:00 position.	P-K220	\$13.50
Set screw in 12:00 position.	P-K221	13.50
Internal metal bandswitch link. 3:00 set screw. Internal part for large Zenith radios made in 1940-1942 that the bandswitch wheel attaches to. Originally a potmetal part.	P-K223	11.95

Reproduction Molded Plastic Knobs

RCA	Description	Part #	Price
	1 3/8" diameter, 1/4" shaft. Brown ¹	P-K197	\$5.75

Atwater Kent

Description	Part #	Price
1 3/8" diameter. Brown ²	P-K982	\$5.95
1 5/8" diameter. Brown ³	P-K983	6.75
3 1/8" diameter. Brown with white engraving ⁴	P-K984	7.95

**Wood Knobs**

An exact reproduction of an early wood knob commonly found on many radios from 1928-1934. Knob is 1" diameter and 3/4" deep, with metal insert and set screw to fit on 1/4" diameter shaft.

Walnut	P-K903	\$5.75
Mahogany While Supplies Last	P-K904	5.95

Similar to above except different style with 1 1/8" skirt at base of knob.

Walnut	P-K971	\$5.75
Mahogany While Supplies Last	P-K972	5.95

Knob Springs

Assortments of knob springs for half moon shaft. All are "D" shaped and sold in bags of six.

3/8" high x 5/32" overall diameter	P-KS215	\$1.15
3/8" high x 11/32" overall diameter	P-KS221	1.20

**Reproduction Molded Plastic Knobs****Philco**

Molded Plastic knobs with set screw to fit 1/4" shaft

Description	Part #	Price
Rosette Knob used on 1931-32 Philco Cathedral ¹		
1 1/4" diameter tuning knob, Brown	P-K175	\$6.95
7/8" diameter, Brown	P-K176	6.95
1 1/8" diameter skirt, 7/8" diameter face.	P-K177	6.95

Hex-shaped knob. Used on 1933-34 Philcos²

1" diameter tuning knob, Black	P-K178	6.95
1 3/16" diameter, Black	P-K179	6.95

Mid 30's Knobs. Push-on for flatted shaft. No set screw

1 1/8" diameter knob with pointer, Brown ³	P-K181	\$5.75
1 1/8" diameter inner knob for concentric tuning ⁴	P-K185	6.50
1 3/8" diameter outer knob for concentric tuning ⁵	P-K186	6.50
1 1/8" diameter with pointer. 5/16" long x 1/2" neck to extend into cabinet ⁶	P-K209	6.50

**Philco Pushbuttons**

Reproductions of the wine-colored pushbuttons used for station presets on 40's vintage Philcos. Buttons measure 7/16" x 7/16" across front surface and come in two lengths. Back of buttons are slotted to fit onto 3/16" switch actuator.

3/4" long	P-K411	\$2.95
1 1/4" long	P-K412	3.00

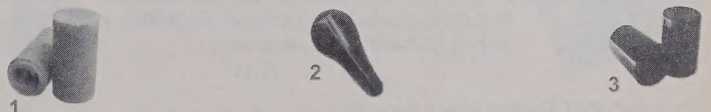
Reproduction TRF Tuning Knob

Direct reading channel dials for Atwater Kent radios. Replaces original knobs graduated 0-100, with direct frequency markings 55-150 for the broadcast band. 3 1/4" overall diameter, 1/4" shaft size with set screw.

P-K210R	\$7.95
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Miscellaneous NOS Knobs

7/8" x 7/8" dia. Pushbutton (Zenith) Ivory ¹	P-K923	\$1.00
1 1/2" long pointer knob. Brown. 1/4" shaft ²	P-K454	1.25
9/16" long, 3/8" diameter pushbutton. Black ³	P-K810	1.00

**Generic Replacement Knobs**

Late 1930's style radio knob, injection molded plastic. 1" diameter, fits 1/4" shaft, with set screw. Brown.

P-K981	\$5.95
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Brushed face knob with indicator line, fits 1/4" shaft, 1 1/4" diameter, double set screw. Ivory.

P-K304	3.25
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Radio Knob Felt

Premium quality wool felt washers. Medium brown in color, these washers will resist wear and hold their shape over time. All have center holes punched. Most have 1/4" interior diameter. Sold in packages of 5 per size.

1/4" overall diameter	P-H181	\$1.75
3/4" overall diameter	P-H200	1.80
7/8" overall diameter	P-H201	1.95
1" overall diameter	P-H202	2.10
1 1/4" overall diameter	P-H203	2.25



fax: 480.820.4643 OR 800.706.6789 (us & canada only)

Power Supply Kit for Early Battery Radio

- Input:** 120V, 60 Hz.
"A" Output: Adjustable and regulated 1.5 to 7.5 volts, 1.5 Amps.
"B" Output: 22, 45, 67, 90, and 135 volts regulated up to 50 mA.
"C" Output: Adjustable, 0 to 22 volts. Regulated.

Kit includes transformer, rectifiers, capacitors, resistors, transistors, regulator I.C. and all hardware and white pine board. Easy to follow instructions for assembly. You need only a screwdriver and soldering iron. 3.0 lbs.

K-101A \$54.95

Beginners Crystal Radio Kit

Crystal radio kit is ideal for the beginning radio hobbyist. Comes complete with tuning coil that you get to wind, slider, germanium diode and earphone.

K-401 \$10.95

Crystal Detector

A working reproduction of the "Junior Detector Stand" sold by the William B. Duck Co. in 1921. Base is finished in dark mahogany, metal fittings are polished brass, gold lacquered. Crystal included. Base diameter is 3", overall height is 3".

K-411 \$49.95

Crystal Detector

Beautiful wood based detector comes complete with cat's whisker, ball and rod assembly, holder for galena crystal and old style binding posts. Base is 1 3/4" x 3 1/4"

Galena crystal not included.

K-412 \$18.95

World War II Foxhole Radio Kit

Build an AM receiver using only a razor blade, pencil lead, coil and earphone! Contains all necessary parts, base and instruction book.

K-414 \$13.95

Crystal Radio Kit

A simple, yet highly sensitive crystal radio kit made out of common items found in most homes. Comes with pre-wound coil and galena crystal. Great one night project for the beginner or the kids. Marvel at listening to a radio made from "nothing". **Requires crystal earphone (P-A480 order separately).**

K-417 \$24.95

Crystal-Set Experimenters Kit

Experiment & design different crystal radios; capabilities of circuits limited only by the builder. Consists of chassis, front panel, 2 spider web coils mounted to be variable to each other, cylinder style coil with 4 windings, 2-365 pf single gang variable capacitors, trimmer caps, diodes, miscellaneous capacitors, all hardware and instructions.

While Supplies Last

K-418 \$44.95

A.M. Hi-Fi Tuner Kit with Cabinet

Nothing more than a Crystal Radio, this A.M. Hi-Fi Tuner is a nice addition for the serious audiophile. There is no power supply, etc. to introduce "foreign" noises into the circuit. This "three stage/dual diode" assembly reaches down and separates the stations like no other crystal radio circuit produced. This unit boasts a wide versatility in antenna and ground, so it will work most efficiently for your A.M. environment. The resulting audio output can be fed to a Hi-Fi amplifier or a high quality 2000 ohm double headphone. Easy to assemble, with a raw/unassembled pine cabinet. The unit is 11" x 5 1/2" x 6 1/2" deep.

K-420 \$76.95

Two Tube Regenerative Radio Kit with RF Amp

Broadcast bands to 8 MHz. Operates on a 1.5V "C" size and 45V (S-Z415) battery and two 1T4 tubes (order these items separately). RF amplifier stage boosts input signal and prevents radiation to feed-back into antenna, typical of regenerative receivers. Kit includes pre-drilled base and front panels, dial panel, variable capacitor, germanium diode, coil forms, coil wire, knobs, hook-up wire and hardware. 4 1/2" x 7 1/4" x 4 3/4". 1.0 lb. **Optional:** Unassembled/Unfinished pine cabinet available (K-600)

K-425 \$39.95

Short Wave Crystal Radio Kit

Tune in worldwide signals from 3 to 14 MHz on a crystal radio! Unit works more efficiently with Antenna Tuner Kit (K-435) and AM Rejecter Trap Kit (K-435). Kit includes pre-drilled base and front panels, dial panel, variable capacitor, germanium diode, coil forms, coil wire, knobs, hook-up wire and hardware. 4 1/2" x 7 1/4" x 4 3/4". **Optional:** Unassembled/Unfinished pine cabinet available (K-600)

K-432 \$32.95

Tapped Coil Crystal Radio

Build a crystal radio with great sensitivity and selectivity across the broadcast band! Unit works more efficiently with Antenna Tuner Kit (K-435) and AM Rejecter Trap Kit (K-434). Kit includes pre-drilled base and front panels, professional dial panel, variable capacitor, germanium diode, coil forms, coil wire, knobs, hook-up wire and hardware. 4 1/2" x 7 1/4" x 4 3/4". Antenna/Ground wire and earphone not included. 1 lb. **Optional:** Unassembled/Unfinished pine cabinet available (K-600)

K-433 \$32.95

Antenna Trap Kit

Very useful for crystal, TRF and regenerative radio experimenting. This trap, when placed in series with your antenna can help to null powerful stations that "swamp" the weaker ones. Unit works more efficiently with Antenna Tuner Kit (K-435). Kit includes pre-drilled base and front panels, professional dial panel, variable capacitor, germanium diode, coil forms, coil wire, knobs, hook-up wire and hardware. 4 1/2" x 4 3/4" x 3 3/4". Antenna/Ground wire not included. 1 lb. **Optional:** Unassembled/Unfinished pine cabinet available (K-600)

K-434 \$23.95

Antenna Tuner Kit

Tuner covers 375 KHz through 30 MHz! Can be switched from "parallel" to "series" resonance for more complete coverage on all bands. Coil is tapped for inductance changes. Most efficiently used with AM Rejecter Trap (K-434). Kit includes pre-drilled base and front panels, professional dial panel, variable capacitor, germanium diode, coil forms, coil wire, knobs, hook-up wire and hardware. 4 1/2" x 7 1/4" x 4 3/4". Antenna/Ground wire, headphones and 1T4 tube not included. 1 lb. **Optional:** Unassembled/Unfinished pine cabinet available (K-600)

K-435 \$32.95

One Tube Regenerative Receiver Kit

With ("spider web" coils) Broadcast band through 8MHz (approx.) Kit includes pre-drilled base and front panels, professional dial panel, variable capacitor, germanium diode, coil forms, coil wire, knobs, hook-up wire and hardware. 4 1/2" x 7 1/4" x 4 3/4". Antenna/Ground wire, headphones and 1T4 tube not included. Operates on a 1.5V "C" size and 45V (S-Z415) battery not included. 1 lb. **Optional:** Unassembled/Unfinished pine cabinet available (K-600)

K-436 \$32.95

Two Tube AF Amplifier Kit

Greatly boosts the audio output of small receivers. Used with Crystal, TRF and Regenerative Receivers and high impedance earphones. Power requirements: 45-90 V/DC, Plate and 1½ V/DC Filament power. May use: A/B Battery Supply Kit (K-438 recommended), or K101A Kit. Kit includes pre-drilled base and front panels, professional dial panel, Volume Potentiometer, Tube Sockets, knobs, hook-up wire and hardware. 4½" x 7¾" x 4¾". Headphones and two 1S4 tubes not included. 1.0 lb. **Optional:** Unassembled/Unfinished pine cabinet available (K-600)

K-437 \$24.95

A/B Battery Supply Kit

Provides A/B battery power for small, tube-type regenerative radios and amplifiers using tubes with 1½ V/DC filaments. This kit uses ten 9V transistor batteries and two "C" cells. Kit includes pre-drilled base and front panels, professional dial panel, battery holders, knobs, hook-up wire and hardware. 4½" x 7¾" x 4¾". 1.0 lb.

Optional: Unassembled/Unfinished pine cabinet available (K-600)

K-438 \$23.95

Wireless Transmitter Kit

Now your antique radio can play some of the same programs it did when it was new! With your cassette tape player, phonograph or high output microphone, this one-tube transmitter becomes a miniature AM broadcasting station, patterned after the 1939 Zenith model S-7000 Wireless Record Player. Assemble on a 4 x 6½" breadboard, all parts and instructions included. 2.0 lbs.

K-488 \$35.95

Unfinished/Unassembled Pine Cabinet

New and very versatile. This handsome cabinet is made of pine and can be assembled and finished very easily. Adds a remarkable, professional look to your projects. Comes with all materials and hardware, including quick and easy instructions. 2 sizes available.

For panels 4¾" x 7¾" x 1/8" thick, approx. 5½" deep. 1.5 lbs.
Use with kits: K-425, 432, 433, 435, 436, 437 and 438.

K-600 \$22.95

For panels 3¾" x 4¾" x 1/8" thick, approx. 5½" deep. 1.5 lbs.
Use with kit: K-434

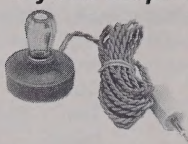
K-601 \$19.95

High Impedance Double Headset

High quality 2000 ohm double headphone. Has black light weight plastic ear caps, with metal headband, plastic cord and 2 phone tips. Works great with crystal set or our one tube radio kit. 6 oz.

P-A466 \$16.95

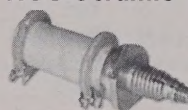
Crystal Earphone



High impedance crystal earphone is very sensitive and works great with crystal radios. Has 3 ft. cord and miniature (3.5mm) plug.

P-A480 \$3.25

NOS Ceramic Coil Form



1" tall with adjustable slug.

P-C210 \$4.95

Plug-in Coil Forms



Wind your own coils with these brown plastic plug-in coil forms. 2½" x 1¼" dia. Standard 5-pin base.

P-C211 \$5.50

Crystal Cover



Glass crystal cover for Philmore and other crystal sets. 1" O.D. by 1⅞" high.

P-D125 \$11.95

Cats Whiskers



Similar to the Philmore cat's whiskers and others. Made of phosphor bronze. Pkg/3.

P-H415 \$2.85

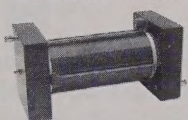
Spider Web Coil Form



Same as used in K-406. 3¾" dia. Made of press board. Has leg for mounting to radio base. Use with magnet wire on p. 62.

P-H500 \$2.95

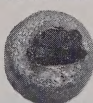
"Mascot Tuning Coil"



A working reproduction of the loose coupler featured in the William B. Duck Catalog of 1921. Beautifully finished mahogany ends and brass rods. Originally advertised as designed to greatly increase the range of any of the receiving sets for experimental use. With 60 foot aerial it will respond to wave lengths up to about 800 meters. 3½" square by 7⅞" long. Assembled.

P-M166 \$39.95

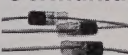
Galena Crystals



Mounted Galena Crystals, like those used in early crystal detectors. Ideal for K-412 and other detectors.

P-Q111 \$2.50

Germanium 1N34A Diode



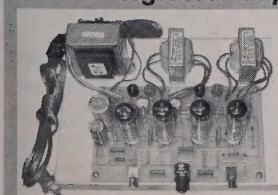
Point contact germanium diode, ideal for crystal radio detectors. While Supplies Last.

P-Q972 \$2.50

NEW! Tube Audio Amplifier Kits- Available in November 2001

All tube design rivals sound of high end audio amplifiers costing 10 times as much! These kits are designed by George H. Fathauer. Enjoy the thrill of high end audio without going broke and enjoy the satisfaction in building it yourself. Kits come complete will all parts and easy to follow instructions.

Stereo Integrated Amplifier Kit

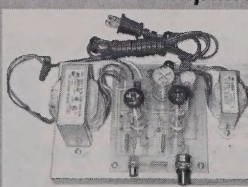


Input Impedance: 100K ohms
Output Impedance: 8 ohms
Power Output: 8 watts per channel
Frequency Response: 20 to 20,000 Hz
Minimum Input for Full Output: 0.3V
Total Harmonic Distortion @ 1 W: <1%
Uses 11BM8 tubes included in the kit.
Also includes board for mounting PC

board and transformers.

K-502 \$139.95

Monoblock Amplifier Kit



Input Impedance: 100K ohms
Output Impedance: 8 ohms
Power Output: 8 watts
Frequency Response: 20 to 20,000 Hz
Minimum Input for Full Output: 0.3V
Total Harmonic Distortion @ 1 W: <1%
Uses 11MS8 tubes included in the kit. Also includes board for mounting PC board and transformers.

K-501 \$89.95

fax: 480.820.4643 OR 800.706.6789 (us & canada only)

Leather Replacement Handles for Early Radios

Genuine Leather handles fit many Zenith, Philco and Emerson portable radios, as well as other brands. Includes metal brackets and rivets.

Bracket Spacing	Color	Part #	Price
4.5"-5.5"	Tan ¹	P-H254	\$16.95
4.5"-5.5"	Black ¹	P-H255	16.95



5"-6"	Tan ²	P-H256	16.95
5"-6"	Black ²	P-H257	16.95

5.5"-6.5"	Black ³	P-H258	19.95
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Direct replacement for early RCA portables! Leather with steel reinforced handle, 6 1/8" spacing, brown. ⁴			
		P-H259	24.95

Atwater Kent, Stewart-Warner¹

The AK name comes in both solid gold and solid black colors, and the Stewart-Warner name is black with gold outline. Also contains the words 'OFF-ON,' 'VOLUME,' 'TONE,' 'BAND,' 'AM,' 'FM,' 'BC,' 'POL,' and 'AV.'

S-M906 \$4.95

Emerson Treble-Clef Logo²

Gold with black outline in two common sizes. Also contains the words 'OFF-ON,' 'VOLUME,' 'TONE,' 'BAND,' 'AM,' 'FM,' 'BC,' 'SW,' 'POL' and 'AV.'

S-M905 \$4.95

Philco³

Features the Philco name in 3 sizes, and 20 different knob function labels as found on Philco receivers of the 1930's and 1940's. All in gold with black outline. "OFF-ON," "BASS," "B'DC'ST," "POL," "S.W.," "TONE," "BAND SELECTOR," "TRANSITONE," "HIGH FIDELITY," "MAGNETIC TUNING," "VOLUME," "TREBLE," "SELECTIVITY," and "PHONO-RADIO."

S-M907 \$5.95

General Electric, Fada & Garod⁴

The "General Electric" logo appears in 3 commonly used sizes, along with "Fada Radio," and "Garod." Gold with black outline.

S-M909 \$5.50

Emerson, DeWald, Belmont, Sonora & Tom Thumb⁵

Gold with black outline. "Emerson" script logo (without treble clef sign) and other manufacturer's logos for popular plastic radios.

S-M910 \$5.50

RCA, Stromberg-Carlson & Admiral⁶

Gold with black outline. "RCA Victor" appears in three different logo styles, along with "Stromberg-Carlson" and "Admiral."

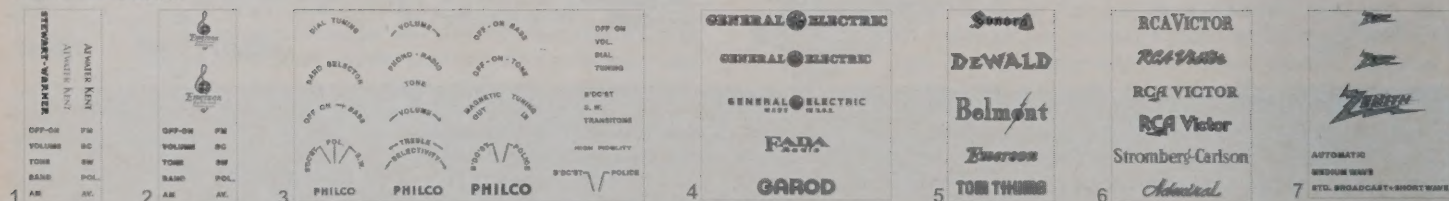
S-M908 \$5.75

Zenith⁷

Gold with black outline in two common sizes. Also contains the words 'AUTOMATIC,' 'MEDIUM WAVE,' 'STD. BROADCAST,' and 'SHORTWAVE.'

S-M904 \$4.25

Note: Not to scale.

**Decal Deal!**

We have another deal for you. Buy one of each type of decal and receive over 20% off if you purchased each one individually.

S-MDECAL-SD \$29.45

Instructions for Applying Water Release Decals

Cut out the portion of the decal sheet to be used and soak in warm water until the decal slides off the paper backing. Immediately apply wet decal to the radio cabinet and pat dry. Lacquer finish may be applied over the decal(s) if desired. Do not soak too long, and watch carefully!

Mohawk Ultra-Classic Toner

Ultra-Classic Toners utilize a non-fading, non-bleeding dye to provide excellent clarity. Wood shades can be varied without imparting the "muddy" effect sometimes associated with pigment type toners. Get dye-based transparency with the highest rating of light-fastness available for dyes. Excellent flow out, Mar & alcohol resistant, No overspray. Net weight 13 oz.

Perfect Brown-A nice warm shade that is great match for 1930's and 1940's sets. **S-F306*** **\$7.95**

Walnut Brown-Use as a replacement for Burnt Umber. Great for late 1920's to early 1930's sets. **S-F309*** **7.95**

Mohawk Tone Finish Toner

Also known as shading of toning lacquer. This is an opaque, pigmented lacquer finish that will build a darker and darker color with subsequent coats. Best for duplicating the shading effect on the edges of cabinets. Should be top coated with clear after the desired color is achieved. Net weight 13 oz. Van Dyke Brown. **S-F305*** **\$7.95**

Mohawk Ultra-Flo Clears

Formulated with special resins and solvents to provide a finish film free of orange peel. Little or no overspray when used over spot repairs or over an existing lacquer finish. Saves time, as the finish film will not require sanding or rubbing. Net weight 13 oz.

Gloss **S-F301*** **\$7.95**

Satin **S-F302*** **7.95**

Flat **S-F303*** **7.75**

Mohawk Lacquer Sanding Sealer

Helps fill grain pores on open grain woods and prevent blotchy absorption of penetrating stains on birch or maple cabinets or trim pieces. Seals end grain. Net wt. 13 oz aerosol can. **S-F304*** **\$7.75**

Clear Spray Shellac

Provides a clear coating for many different surfaces. Shellac has an unusual adhesion to hard-to-grip surfaces. Hold out is exceptional on wood, plywood and plaster. Recommended for spot sealing knot holes, sap streaks and refilled areas before refinishing. Net weight 12 oz.

S-F308* **\$8.95**

"Micro-Mesh" Plastic Restoration System

The most efficient system available for removing scratches and haziness from plastic radio cabinets and clear dial windows. Each kit contains 5 pieces of 3" x 6" Micro-Mesh cushioned abrasive cloth ranging from coarse to ultra-fine, foam sanding block, 3 oz bottle of Micro-Gloss liquid abrasive and a soft buffing cloth. Net weight 8 oz. **S-C228** **\$22.95**

Plastic Polish

Novus #1 - Cleans and glazes plastic surface to resist finger markings, dust buildup and is anti-static.

2 ounces **S-C216** **\$2.95**

8 ounces **S-C226** **5.25**

Novus #2 - Removes fine scratches, abrasions and haziness from plastic surfaces. Great for plastic radio dial windows. For best results, follow with Novus #1 polish.

2 ounces **S-C217** **3.50**

8 ounces **S-C227** **6.25**

Novus #3 - Removes scratches from acrylic surfaces. More abrasive than #2. Effective for deeper scratches. Treatment must be followed by #2 to buff and polish the surface.

2 ounces **S-C215** **3.95**

8 ounces **S-C225** **7.50**

Buy each type of the 8 oz size bottles and receive over 10% off the single piece price. **S-CPOLISH-SD** **16.95**

Plas-T-Pair

A complete repair kit for plastic knobs, radio cabinets and other plastic parts. It can be poured into a crack or molded to fill gouges, holes, or make parts. After setting it can be sanded, drilled or polished. **S-C244** **\$10.50**

Tibet Almond Stick

Wipes out scratches in wood radio cabinets quick-as-a-wink. Simply rub end of stick over scratches in any type of wood and watch them disappear like magic! **S-C243** **\$4.50**



Lacquer Stick Wipe On Paintstick

Quick economical way to color engraved lines or stampings on metal, glass, plastics, etc. Works great for filling in markings on TRF radio dial knobs and faceplates.

White **S-F229** **\$2.95**

Gold **S-F230** **4.25**

Red **S-F437** **2.95**

Black **S-F438** **2.95**

Wrinkle Finish

Great for refinishing vintage metal radio cabinets, faceplates and speakers. 12 oz. spray can.*

Jet Black **S-F227*** **\$6.95**

Grey **S-F701*** **7.95**

Hints for Wrinkle Finish paint: Surface must be clean and dry.

Clean means no oil, grease or fingerprints. Be sure that temperature of the paint can and the surface to be painted is between 70 and 90 degrees. Spray with even strokes at a distance of 8" to 12". Apply a fairly heavy coat. Spray a 2nd coat approximately 3 minutes after the 1st, also fairly heavy. The wrinkling will appear gradually, requiring about 12 hours at room temp to completely develop. **Tip:** experience seems to indicate that a better finish develops when sprayed onto bare metal.

Do-It-Yourself Electroplating

Replate nickel, silver or brass radio and phonograph parts. Uses current from any 3 to 6 volt DC supply or batteries. Plating brush connects to positive voltage and part being plated connects to negative. Brush sold separately. 2 oz. jar.

Plating Compound

Gold **S-F221** **\$85.95**

Brass **S-F222** **7.95**

Copper **S-F296** **7.95**

Nickel **S-F223** **12.95**

Silver **S-F224** **24.95**

Plating Brush (instructions included) **S-F225** **5.75**

Tolex Adhesive 3M Super 77

Spray adhesive ideal for bonding tolex (or any other cloth, foil, felt, paper, etc.) to plastics, painted or unpainted metals, wood, hardboard and many other materials. Provides high coverage (over 160 sq. ft. per can), faster, more aggressive tack, longer bonding range and lower soak-in. Two spray tips are provided, one for large bonding areas and the other for smaller bonding areas. 16.5 oz aerosol can.

S-F315 **\$11.95**

fax: 480.820.4643 OR 800.706.6789 (us & canada only)

**Philco Radio Dials**

Philco generally used these dials with the listed models; however, there are some exceptions so please check your equipment thoroughly. Light brown translucent plastic with black lettering.

Philco 33B ¹	P-D27-5210	\$14.95
Philco 84B ²	P-D27-5168	13.95
Philco 37-84 ³	P-D27-5031	13.95
Philco 93B ⁴	P-D27-5100	13.95

Atwater Kent Tuning Belts

Beryllium copper belt stock for early AK and other dial drives. .004" thick by 3/16" wide. Can be easily soldered for joint. 5 feet long.

S-M242 \$5.95

Atwater Kent Dial Drive Pulley

A functional reproduction of the Atwater Kent pulley used in the belt drive systems of mid-twenties vintage TRF receivers. Pulley is double-width two-belt type, but may also be used to replace the single-belt pulleys. 1 5/8" overall diameter, 1/4" inside diameter, 1/2" wide.

P-D115 \$24.95

Black Panel Material

Black Lucite panels closely resemble "Bakelite" panels used on early battery radios. Glossy finish, 1/4" thick. Can be difficult to machine.

8" x 12"	S-M710	\$7.95
8" x 24"	S-M710L	13.95

Dial Drive Cable

We searched and searched and finally found a new supplier for two sizes of dial drive cable. This is a no-stretch black cord made of nylon braid over a fiberglass core. Available in 25' lengths.

Medium/Heavy .040" diameter	S-M74-25	\$4.25
Standard Thin .028" diameter	S-M75-25	3.95

Use with tension springs on p. 60

Also available is dial cord for your Dynaco tuner in case your old stuff is worn or even (dare we say it?) cracked and broken! While Supplies Last.

S-MDYNA 2.50

Dial Stringing and Soldering Tool

While Supplies Last S-T122 \$4.95

Dri-Transfer Lettering

Rub-on lettering simplifies panel labeling, dial marking etc. Available in either black or white.

Dial Marking Kit

Contains dial patterns, arcs, lines, dots, switch symbols, graduation lines, lines for rotary tap switches and calibrated meter dials. 3 sheets.

Black	S-M175	\$4.75
White	S-M176	4.75

Audio, TV and Hi-Fi

Contains over 400 words from 'AC' to 'Zero' in alphabetical order as well as miscellaneous numbers and letters. 1/8" tall lettering. 4 sheets.

Black	S-M177	\$4.75
White	S-M178	4.75

Amateur Radio and CB

Contains over 300 words from 'AC' to 'X-TAL' in alphabetical order as well as miscellaneous numbers, letters and frequency designations. 1/8" tall lettering. 4 sheets.

Black	S-M179	\$4.75
White	S-M180	4.75

Dial Reproduction Material

Translucent tan color plastic sheet, can be cut with scissors. Ideal for making replacement Philco or other dials. 8" x 10" sheet, .016" thick.

S-M190 \$8.95

NOS Dial Belts

Call for limited selection.

S-MDIAL-BELT \$12.95

Dial Glass Rubber Extrusion

High quality neoprene rubber extrusion available in three sizes. Sold by the foot.

5/32" w x 3/16" h .090" internal gap	P-D280	\$3.75
7/32" w x 3/16" h .080" internal gap	P-D281	5.95
1/8" w x 1/8" h .050" internal gap	P-D282	4.50
7/32" w x 1/8" h .100" internal gap	P-D283	3.50

Station Call Letter Tabs

Reproduction paper station inserts like used on Philco and other late '30's and '40's vintage radios with push-button tuning. Over 300 stations provided with 3/16" high letters in translucent ivory color on black background. Trim to size to fit various models.

P-D130 \$4.95

WSMK WSM WSNJ WSMB

Zenith Dial Glass

A reproduction of the round convex glass that covered the tuning dial on middle and late '30's Zeniths. 0.5 lb, 8 1/2" diameter.

P-D272 \$8.95

Dynaco FM-1 Tuner Tuning Indicator Panel

You just replaced the EM84 indicator tube in your Dynaco tuner, but can't see it through the scratches and cracks and years of dirt. Replace the panel with a brand new one!

P-D200 \$2.25

Philco 70 Escutcheon Brown Reproduction

P-D199 \$7.95

**Zenith Log Card**

Perfect replication of the log card from Zenith model 7G605. More commonly known as the Zenith Clipper Transoceanic or Zenith Bomber Transoceanic. Replaces the damaged card that you inherited with your radio. Has semi-gloss finish and matches the original cardboard thickness. Holes are not pre-drilled due to variations from radio to radio.

S-MZENITHLOG \$9.95

Miniature Lamp Sockets

Bayonet lamp sockets for #44 and #47 lamps, etc.

1	P-L101	\$1.50
2	P-L101L	1.75
3	P-L103	.95
4	P-L104	.95
5	P-L105	1.25

**Relampable Indicator Light Fixtures**

Relampable front panel indicators accept a variety of T-2 and T-3 1/4 miniature bayonet lamps. Two colors of fluted dome lens available, three colors of jeweled lens available. 1/16" chassis hole. Fits P-L110, shown above. For more jewel colors, see page 43.

Fluted dome - red	P-L111	\$1.95
Fluted dome - green	P-L112	1.95
Jeweled dome - red	P-L115	2.25
Jeweled dome - green	P-L116	2.25
Jeweled dome - amber	P-L117	2.25
Bayonet Lamp Socket. 75 watt, 125V. 6" leads.	P-L118	2.25
Pilot Lamp Holder. Replacement for Fender® (Does not include jewel)	P-L124	2.25

Dial Lamps

Long life general replacement lamps for dials, indicators, etc. Packages of 10 except where noted.

Type	Volts	Amps	Base	Bulb	Part #	Price
40	6.3	.15	screw	T-3 1/4	P-40	\$3.50
41	2.5	.50	screw	T-3 1/4	P-41	3.50
42	3.2	.35	screw	T-3 1/4	P-42	3.50
43	2.5	.50	bayonet	T-3 1/4	P-43	3.50
44	6.3	.25	bayonet	T-3 1/4	P-44	3.50
45	2.5	.35	bayonet	T-3 1/4	P-45	3.50
46	6.3	.25	screw	T-3 1/4	P-46	3.50
47	6.3	.15	bayonet	T-3 1/4	P-47	3.50
48	2.0	.06	screw	T-3 1/4	P-48	3.50
49	2.0	.06	bayonet	G-3 1/4	P-49	3.50
50	7.5	.22	screw	G-3 1/4	P-50	3.50
51	7.5	.22	bayonet	G-3 1/4	P-51	3.50
53	14.4	.12	bayonet	G-3 1/4	P-53	3.50
55	7.0	.41	bayonet	G-3 1/4	P-55	3.50
56	14.0	.24	bayonet	G-3 1/4	P-57	3.50
57	6.5	1.02	bayonet	G-6	P-81	each 1.25
NE2	120	.0007	wire	T-2	P-NE2	each 1.95
NE16	120		bayonet	T-6	P-NE-16	each 1.95
NE45	105/125	.002	screw	T-4 1/4	P-NE45	each 3.25
NE51	90/110	.0003	bayonet	T-3 1/4	P-NE51	each 1.95
Fuse Type	8.0	.20A	fuse type		P-L108	4.50

Diodes

A semiconductor device which passes current in the forward direction (from anode to cathode), that blocks current in the opposite direction.

Type	Amps	Volts	Part #	Price
1N4005	1	600	P-Q1N4005	\$0.19
1N4007	1	1000	P-Q1N4007	0.19
1N4148A	1	600	P-Q971	0.25
1N5404	3	400	P-Q1N5404	0.39
1N6A05	6	50	P-Q6A05	0.48

Fast Recovery Diodes

Type	Amps	Volts	Part #	Price
1N4937	1	600	P-Q1N4937	\$0.29
FR107	1	1000	P-QFR107	0.29

Hexfred Diodes

High performance, ultrafast diodes. Improve efficiency, reduce noise, allow higher frequency operation.

Type	Amps	Volts	Part #	Price
HFA08TB60	8	600	P-QHFA08	\$2.95
HFA16TA60C	16	600	P-QHFA16T	3.95
HFA16PB120	16	1200	P-QHFA16P	8.25

Silicon Rectifier

While Supplies Last 750MA 600PIV

P-Q974 \$0.29

Indicator Light

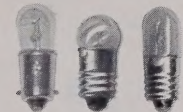
Classic brushed antique finish for use with T-3 1/4 miniature bayonet base bulbs (sold separately). Flat, back frosted green lens. Mounts from rear in 1/16" hole. Comes with 3 knurled mounting rings. 75W, 125V rating. While Supplies Last.

Lamp holder	P-L114	\$1.95
	P-L110	4.25

NPN Transistors

Germanium, package of 4.

U-TRB-5 \$1.29

**Zener Diodes**

A semiconductor device that, above a certain reverse voltage (the zener value) has a sudden rise in current. If forward biased, the diode is an ordinary rectifier. When reverse biased, it exhibits a sharp break in its current-voltage graph. Voltage across the diode remains essentially constant for any further increase of reverse current.

Type	Watts	Volts	Part #	Price
1N4741A	1	11	P-Q1N4741A	\$0.29
1N4748A	1	22	P-Q1N4748A	.29

Bridge Rectifiers

A full wave rectifier with 4 elements in a bridge circuit so that DC voltage is obtained from one pair of junctions when an AC voltage is applied to another pair of junctions.

Type	Amps	Volts	Part #	Price
BR-34	3	400	P-QBR-34	\$0.95
BR-62	6	200	P-QBR-62	1.95
BR-81	8	100	P-QBR-81	2.25
BR-84	8	400	P-QBR-84	1.95
BR-104	10	400	P-QBR-104	2.75
BR-2505	25	50	P-QBR-2505	5.75

Germanium Diodes

1N34A point contact germanium diodes, ideal for crystal radio detectors.

While Supplies Last. P-Q972 \$2.50

fax: 480 820.4643 OR 800.706.6789 (us & canada only)

58 Fans, Fuses, Terminal Boards, Terminal Strips

Fans

Description

Sanyo brushless DC fan. 2 1/4" dia x 1" thick, 12VDC, 70ma.¹

12VDC, 4.5" diameter²

ETRI high quality. 3.6" dia x 1" thick, 115VAC, 65ma.

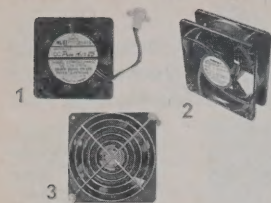
1700rpm, 21cfm. Wire form fan guard and detachable power cord.³

Part # Price

S-FAN01 \$1.95

S-FAN02 3.95

S-99XM 12.95



1/4" x 1 1/4" Fuses

Protect your expensive investment or hobby with the right fuse. Fits fuse block and fuse holder below. **Package of 5 fuses.** New Lower Prices.

Fast-Blo	Part #	Price	Slo-Blo	Part #	Price
1/4 amp	F-ZF005	\$1.95	1 amp	F-ZS010	\$2.95
1/2 amp	F-ZF007	1.95	2 amps	F-ZS020	2.95
1 amp	F-ZF010	1.95	3 2/10 amps	F-ZS030	2.95
1 1/2 amps	F-ZF015	1.95	4 amps	F-ZS035	2.95
2 1/2 amps	F-ZF020	1.95	5 amps	F-ZS040	2.95
3 amps	F-ZF025	1.95	6 amps	F-ZS042	2.95
4 amps	F-ZF035	1.95	6 1/4 amps	F-ZS045	2.95
5 amps	F-ZF040	1.95	7 amps	F-ZS050	2.95
8 amps	F-ZF045	1.95	20 amps	F-ZS080	2.95
9 amps	F-ZF048	1.95	30 amps	F-ZS090	2.95
10 amps	F-ZF050	1.95			

Fuse Holders

Description

1/2" dia. chassis hole, for 3AG fuses¹

Same as above but with lead²

In-line fuse holder for 3AG fuses³

High Quality for 3AG fuses. Marshall™ replacement⁴

High Quality Littell brand for 3AG fuses. Fender® replacement⁵

Fuse Block⁶

Part # Price

S-H258 \$1.95

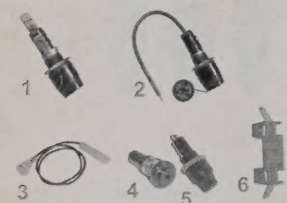
S-H258L 2.95

S-H254 1.00

S-H200 4.95

S-H201 2.95

S-H259 1.95



Point to Point Terminal Boards

Rigid high temp (285° continuous) epoxy board, FR4 0.125" thick with 2/0 copper cladding, 0.500" standoffs, Solid brass electrosolder plated terminals, gold plated ceramic tube sockets, mounting hardware and template included.

Description

Single 9 pin miniature socket. 3" x 3"

Dual 9 pin miniature sockets. 3" x 5 1/4"

Single octal socket. 3" x 3"

Dual octal sockets. 3" x 5 1/4"

For Dynaco Mark III and other similar amplifiers, single ceramic 9 pin min. socket. 3 5/8" x 4 1/4"

For Dynaco Mark III and other similar amplifiers, dual ceramic 9 pin min. socket. 3 5/8" x 4 1/4"

Part # Price

P-PTP0108 \$11.95

P-PTP0209 19.95

P-PTP0109 12.25

P-PTP0208 20.95

P-PTP-MKIII-1 11.95

P-PTP-MKIII-2 19.95



Terminal Strips

Standard size terminal strips, 1/8" thick bakelite, tin plated steel solder lugs and brackets on 3/8" centers. Sold in bags of 5 each except as noted.

Solder Lug Style

Part #	Price
2 lug 1 ground	P-0201H \$1.75
3 lug 0 ground vertical mount	P-0300V 3.25
3 lug 0 ground	P-0300H 1.95
3 lug 1 ground	P-0301H 1.95
4 lug 1 ground	P-0401H 2.25
5 lug 0 ground	P-0500H 2.75
5 lug 1 ground	P-0501H 2.75
6 lug 0 ground	P-0600H 3.15
6 lug 1 ground	P-0601H 3.15
6 lug 2 ground	P-0602H 3.15
7 lug 1 ground	P-0701H 3.25
7 lug 2 ground	P-0702H 3.25
8 lug 2 ground	P-0802H 3.75
9 lug 1 ground Limited Quantity	P-0901H 4.75

Miscellaneous Screw Terminal Strips While Supplies Last

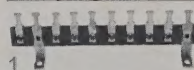
Description	Part #	Price
2 screw, 1 5/8" x 5/8" package of 3	S-H313	\$0.75
6 screw, 4" x 7/8"	S-H317	.25
4 screw, 2 1/8" x 1 3/8"	S-H318	.50
1 screw, 1 1/4" x 5/8"	S-H319	.25

Terminal Strips

Sold in bags of 5 each except as noted.

Wire Wrap Style

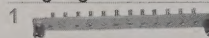
Part #	Price
4 lug 0 ground	P-0400H \$1.95
7 lug 0 ground	P-0700H 2.95
10 lug 2 ground While Supplies Last ¹	P-1002H each 1.25
11 lug 2 ground 8 wire wrap, 3 solder lugs	P-1102H 3.75
30 lug 2 ground	P-3002H each 2.50



Terminal Strips

Epoxy Board Style

Part #	Price
12 lug 0 ground ¹	P-1200H \$4.50
6 lug 0 ground	P-0600H-1 2.95



Phono Jack, Boards

Description	Part #	Price
Double, 1 1/2" x 1" package of 2	S-H310	\$0.50
Square quad, 1 1/2" x 1 1/2"	S-H311	.25
In-Line quad, 3 1/8" x 1"	S-H314	.60
Shorted unit, 8 jacks, with copper grounding strip, 7 3/8" x 3/4"	S-H315	.50

Switchcraft

We Have a Vast Supply of NOS Switchcraft Parts!

If you are looking for something, we probably have it. Just call and give us the Switchcraft part number e.g.: **W-SC** _____.

Here are a few samples of what we have:

Description	Part #	Price
Adapter - Female 1/4" to Male RCA ¹	W-SC-336A	\$3.95
Adapter - Male XLR to Male XLR ²	W-SC-390	5.95
Plug - Mono 1/4", metal cover ³	W-SC-C270	1.95
Plug - Mono Bantam .173", plastic cover ⁴	W-SC-TT251	2.95
Plug - Stereo 1/4", plastic cover ⁵	W-SC-267	1.95
Jack - 1/4" transfer circuit, 2 conductor ⁶	W-SC-13A	2.25
Jack - Long frame, double closed circuit ⁷	W-SC-MT334B	4.95
DIN Receptacle - 5 contacts @ 240°, solder lugs, for locking plug ⁸	W-SC-61HA5F	3.20
Microphone Connector - 5/16"- 27 THDS, 9/32" max cable diameter ⁹	W-SC-2501F	2.80

Also see page 44 for current production Switchcraft parts.

Banana Plug

Internal stud for solder or solderless connection. Body is hex brass, tip is four leaved, phosphor bronze, nickel or gold plated spring.

Description	Part #	Price
Red (Nickel)	S-H33-032	\$0.95
Black (Nickel)	S-H33-033	0.95
Red (Gold screw type)	S-H264R	1.50
Black (Gold screw type)	S-H264B	1.50

Dual Banana Plug

Mates with Standard dual binding posts with 3/4" centers and can be stacked for multiple connections. Polarity is indicated by rib. Nickel or gold plated. Screw connection.

Description	Part #	Price
Red (Nickel plated)	S-H33-010	\$1.95
Black (Nickel coated)	S-H33-011	1.95
Red (Gold plated)	S-H265R	2.50
Black (Gold plated)	S-H265B	2.50
Black and Red, heavy duty (Gold plated)	S-H269	2.95

Insulated Deluxe Tip Jack

For standard .080" tip plug. Machined contact with turret terminal. Brass body, silver finish. 10A rating. For panels up to .437" thick.

Red	S-H260	\$1.50
Black	S-H261	1.50

Toggle Switches

Choose from two styles of toggle switches. Ball handle (pictured) is SPST, 6A-125V rated. Other is heavy duty, standard "bat" handle, DPDT (on-none-on), 20A-125V rating. Both mount in 1/2" hole. Screw connections.

Ball handle SPST	P-H35-170	\$3.50
Bat handle DPDT	P-H35-146	5.50

Slide Switches

Standard size. Cadmium plated solder connections. 11A-125VAC, 5A-125VDC, DPDT. Package of 2.

	P-H35-242	\$1.50
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Rotary Switches

0.3A-125V current rating, contact and terminal material are silver plated phosphor bronze. 5 Position, 2 pole, non-shorting 1/4" round shaft, solder connections.

	S-H35-377	\$5.25
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Also available while supplies last: Chassis mount rotary switches, 1/4" shaft. 3 pole, 4 position.

	P-H034	2.50
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Individual Binding Posts

Accepts standard banana plug, test and phone tip plugs, spade lugs, alligator clips and bare wire.

While Supplies Last.		
Red	S-H2131R	\$0.95
Black	S-H2131B	.95

Dual Binding Post

Red and black posts, accepts either single or dual banana plugs. Mounts in two 1/2" holes on 3/4" centers, panel thickness up to 1/4". 15A rating, gold plated contacts.

	S-H263	\$3.95
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Phone Tip

Standard .080" pin with .136" solder cup. Hollow tip, nickel-plated. Package of 10.

	S-H33-156	\$6.50
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RCA Dual Cables

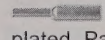
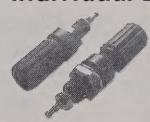
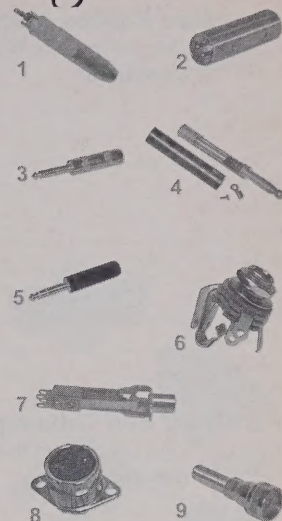
6' dual cables for line in/out for VCR's, tuners, pre-amps, etc. Red and black plugs.

	S-H270	\$0.95
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Banana Jacks

Recessed, comes as a pair.

	S-H404-137	\$0.95
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fax: 480.820.4643 OR 800.706.6789 (us & canada only)

Pan Head Phillips Machine Screws


Zinc, package of five.

Description	Part #	Price
4-40 x 1/4"	S-HS440-14	\$0.30
4-40 x 3/8"	S-HS440-38	.30
4-40 x 1/2"	S-HS440-12	.35
6-32 x 1/4"	S-HS632-14	.35
6-32 x 3/8"	S-HS632-38	.40
6-32 x 1/2"	S-HS632-12	.40
8-32 x 3/8"	S-HS832-38	.45
8-32 x 1/2"	S-HS832-12	.50
8-32 x 3/4"	S-HS832-34	.50
10-32 x 1/2"	S-HS1032-12	.75
10-32 x 3/4"	S-HS1032-34	.90
10-32 x 1"	S-HS1032-1	.90

Pan Head Self Tapping Screws


Zinc, package of five.

Description	Part #	Price
#6 x 3/8"	S-HST6-38	\$0.40
#8 x 3/8"	S-HST8-38	.50
#8 x 1/2"	S-HST8-12	.50

Sheet Metal Screws


Hex head, cadmium plated screws, ideally suited to all electronic devices. At least 15 pieces per package.

Description	Part #	Price
#6 x 3/8"	S-H351	\$0.30
#8 x 3/8"	S-H352	.30
#8 x 1/2"	S-H353	.30

#10 Machine Screws


Ideal for transformer mounting. Package of four.

Description	Part #	Price
	P-H245	\$1.00

Flat Washers

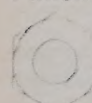

Zinc, type A narrow, package of five.

Description	Part #	Price
#4	S-HW4	\$0.30
#6	S-HW6	.30
#8	S-HW8	.30
#10	S-HW10	.30

Internal Tooth Lock Washers


Zinc, package of five.

Description	Part #	Price
#4	S-HLW4	\$0.40
#6	S-HLW6	.40
#8	S-HLW8	.40
#10	S-HLW10	.45

Finished Hex Nuts


Zinc, package of five.

Description	Part #	Price
4-40	S-HHN440	\$0.30
6-32	S-HHN632	.30
8-32	S-HHN832	.30
10-32	S-HHN1032	.30

T-Nut


Zinc, package of five.

Description	Part #	Price
6-32	S-HTN632	\$1.00
8-32	S-HTN832	1.00
10-32	S-HTN1032	1.00

Alligator Clips


Will accept bare wire or standard banana plugs.

Description	Part #	Price
Insulated barrel, box of ten	S-H301-103	\$3.00
Plain, package of four (not shown)	S-H302	.30

Cable Ties

Description	Part #	Price
3 1/2" long, package of 10.	S-H376	\$0.25

Atwater Kent Binding Post Nuts


One flat nut, one scalloped nut

Description	Part #	Price
Small: 3/8" diameter, 6-32 threads	P-H601	\$3.95
Large: 7/8" diameter, 8-32 threads	P-H602	4.95

Decorative Head Screws


Like used for speaker mounting on 1930's vintage radio cabinets. All are #8-32, 1 1/2" long. Sold in Packages of four.

Description	Part #	Price
Nickel Plated ¹	P-H240	\$3.00
Brass Plated ²	P-H241	3.00
Bronze Plated ²	P-H242	3.00
Unplated ²	P-H243	3.00
Nickel Plated ²	P-H244	3.00

Circuit Board Mounting Bracket


5/8". Package of four. While Supplies Last.

Description	Part #	Price
	P-H197	\$0.50

Early Style Binding Post


An exact reproduction of an early Philmore binding post. Precision machined from brass, nickel plated. 1/4" x 5/8" high, with screw.

Description	Part #	Price
	S-H159	\$2.95

Antenna Clip


1/2" diameter.

Description	Part #	Price
	S-H303	\$0.19

Quick Connect Terminals

Description	Part #	Price
Push on male & female. Package of 12. ¹	S-H372	\$0.60
#8 open end spade. Package of 20. ²	S-H373	.75
Rivet or bolt mount. Package of 24. ³	S-H374	.60
Spring loaded. Package of 25. ⁴	S-H375	.75

Small Wire Nuts


Great for hobbyists. Package of 12.

Description	Part #	Price
	S-H408	\$0.25

Tension Springs


Use for dial drive or turntable. Package of 10.

Description	Part #	Price
	S-H400	\$1.00

Hedlock Fasteners


These super sturdy fasteners are great for speaker covers or helping prevent earthquake damage. Four sets of two clips. (Package of 8)

Description	Part #	Price
	S-SJ-3201	\$1.20

"C" Washer Assortment


Contains 25 of the most popular sizes.

Description	Part #	Price
	S-H401	\$1.75

Solder/Ground Lugs


Package of 10.

Description	Part #	Price
	S-H112	\$1.95

Fiber Washer Assortment


Description	Part #	Price
	S-H402	\$0.75

Fahnestock Clip


Spring clip 3/4" long for up to 14 gauge wire. #6 mounting hole.

Description	Part #	Price
package of 100	S-H11-4034	\$11.95
package of 6	S-H11-4043-6	1.00

Snap-Lock Wire Tie Clips


Package of 20.

Description	Part #	Price
	S-H377	\$0.25

Wire Clamp


High quality, with rubber protector.

Description	Part #	Price
	P-H1101	\$0.25

Rubber Chassis Mount Washers

Gum rubber chassis mounting washers as used on 30's vintage Zenith and Philco radios. Allows proper dial centering in cabinet opening. P-H182 and P-H187 have adhesive backing for laminating to other washers to increase the thickness.

$\frac{1}{8}$ " inner diameter.

1 $\frac{1}{4}$ " diameter x $\frac{1}{8}$ " thick	P-H182	\$1.15
1 $\frac{1}{4}$ " diameter x $\frac{1}{4}$ " thick	P-H183	1.15
$\frac{7}{8}$ " diameter x $\frac{1}{8}$ " thick	P-H185	1.15
$\frac{7}{8}$ " diameter x $\frac{1}{4}$ " thick	P-H186	1.15
1 $\frac{1}{4}$ " diameter x $\frac{3}{8}$ " thick	P-H187	1.75

Rubber Bumpers and Feet**Screw On Type:**

$\frac{1}{2}$ " diameter x $\frac{1}{4}$ " high ¹	P-H1308	\$1.50
$\frac{5}{16}$ " diameter x $\frac{3}{8}$ " thick	P-H253	2.20

Self Adhesive Backing:

$\frac{5}{32}$ " high x $\frac{7}{16}$ " diameter ²	P-H16-150	\$3.60
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Button Bumpers:

$\frac{7}{16}$ " diameter x $\frac{5}{16}$ " high. Package of 4. ³	P-H1309	\$1.50
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Recessed Bumpers:

$\frac{5}{8}$ " diameter x $\frac{1}{2}$ " high ⁴	P-H2082	2.40
$\frac{5}{8}$ " diameter x $\frac{1}{2}$ " high, Steel insert ⁴	P-H2082S	2.90
1" diameter x 1" high ⁵	P-H2097	6.50
1" diameter x 1" high, Steel insert ⁵	P-H2097S	6.96

Rubber Grommets

Protect electrical wires and cables from sharp edges in holes drilled through chassis boxes. Groove is $\frac{1}{16}$ " wide on all grommets except P-G516A, which is $\frac{7}{64}$ ". Package of 5.

Chassis Hole**Grommet Hole**

Diameter	Diameter	Part #	Price
$\frac{1}{4}$ "	$\frac{1}{8}$ "	P-G014	\$1.00
$\frac{3}{8}$ "	$\frac{1}{4}$ "	P-G038	1.25
$\frac{5}{16}$ "	$\frac{3}{16}$ "	P-G516	1.25
$\frac{5}{16}$ "	$\frac{3}{16}$ "	P-G516A	1.50
$\frac{7}{16}$ "	$\frac{1}{4}$ "	P-G716	1.50
$\frac{7}{16}$ "	$\frac{5}{16}$ "	P-G717	1.95
$\frac{1}{2}$ "	$\frac{3}{8}$ "	P-G005	1.95

Vibrapod

Enhance your listening sessions! These affordable vibration isolators improve bass definition and depth, dynamics, imaging, detail resolution, ambiance, clarity and sound stage. Four different models support from 2 to 28 pounds each. All are $2\frac{1}{2}$ " diameter x $\frac{9}{16}$ " high. Temperature range from 50°F to 100°F.

Model 1: has a weight range of 2-3 lbs each, recommended weight is $2\frac{1}{2}$ lbs. Suggested uses: CD, DVD, Laserdisc players & transports, DSS receivers, DAC's, preamps, amplifiers and speakers up to 32 lbs. **S-VIBRA1 \$6.00**

Model 2: has a weight range of 4-8 lbs each, recommended weight is 6 lbs. Suggested uses: CD, DVD, Laserdisc players & transports, DSS receivers, DAC's, preamps, amplifiers and speakers from 24-72 lbs. **S-VIBRA2 6.00**

Model 3: has a weight range of 8-12 lbs each, recommended weight is 10 lbs. Suggested uses: Heavy amps or speakers, units over 72 lbs. **S-VIBRA3 6.00**

Model 4: has a weight range of 14-18 lbs each, recommended weight is 16 lbs. **S-VIBRA4 6.00**

Model 5: has a weight range of 22-28 lbs each, recommended weight is 25 lbs. Suggested uses: Extremely heavy amps or speakers, units over 200 lbs. **S-VIBRA5 6.00**

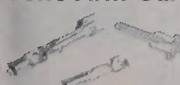
We have a very limited phonograph part inventory. If you don't see what you need, try West-Tech Services in Tennessee at 888.828.8455 or for Needles & Cartridges contact Vintage Electronics at 601.264.4755.

Motor Mounting Grommets

 Rubber grommets for mounting phonograph motors. Measure $\frac{1}{2}$ " diameter, $\frac{5}{16}$ " high and $\frac{1}{4}$ " inner diameter. Package of 9.

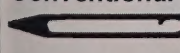
P-R407 \$4.25

Tone Arm Cartridge Screw Assortment

 25 pieces. While Supplies Last

S-P001 \$0.30

Conventional Phonograph Needles

 For all set screw and thumb screw cartridges. Straight steel needles, good for 12 plays each. Package of 25.

S-P119 \$1.95

Phono Pick-Up Wire

Fine extra flexible four conductor, color coded cable, 5' long.

S-WL3-644 \$5.95

Phono Cartridge Connector Assortment

 25 pieces.

S-P002 \$0.95

Spindle

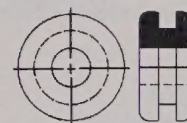
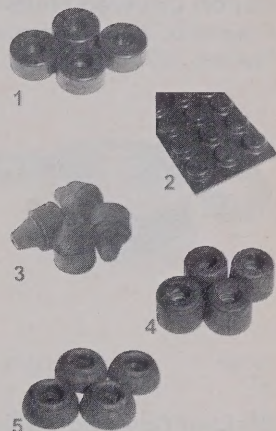
 Universal 45. While Supplies Last.

S-P100 \$4.25

Replacement Needles

 While Supplies Last. Crystal sapphire. 33-45-78 speed, used in Arista/Astatic.

S-P999 \$0.95



fax: 480.820.4643 OR 800.706.6789 (us & canada only)

**Cloth Covered Hook-Up Wire**

#20 stranded copper wire covered with lacquered cotton braid, closely resembles wire used in the late 20's and 30's. Available in 8 colors, on 50' spools.

Color	Part #	Price	Color	Part#	Price
Orange	S-W703	\$7.25	Green	S-W707	\$7.25
Black	S-W704	7.25	Yellow	S-W708	7.25
Red	S-W705	7.25	White	S-W709	7.25
Blue	S-W706	7.25	Brown	S-W710	7.25

Cotton Covered Multi-Conductor Cable

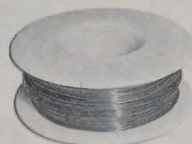
8 conductor 20 gauge stranded wire with brown cotton braid over all. Replaces 1920's Atwater Kent battery cable etc. Sold by the foot.

S-W711 \$3.00

Screaming Deal!

Buy all colors of Cloth Covered Hook-Up Wire at the same time and receive over 10% off over buying each one individually.

S-WHOOKUP-SD \$52.20

**600 Volt Stranded Tinned Hook-up Wire**

Copper wire. UL style 1015, rated to 105°C. Perfect for new projects or rewiring of any electrical equipment. Available in 16 (while supplies last) and 22 gauge on 50 foot spools.

Color	22 AWG	Price	16 AWG	Price
Black	S-W22B	\$3.75	S-W16B	\$4.75
Red	S-W22R	3.75	S-W16R	4.75
White	S-W22W	3.75	S-W16W	4.75
Green	S-W22G	3.75	S-W16G	4.75
Yellow	S-W22Y	3.75		
Orange	S-W22O	3.75	S-W16O	4.75

Braided Covered Power Cord

Brown 2 conductor 18 gauge, stranded power cord, similar to woven cloth covered cords in early AC radios.

20 feet	S-W102-20	\$10.00
50 feet	S-W102-50	22.50
250 foot spool	S-W102-250	89.95
Gold sold by the foot	S-W102G	.75

Large dimension braid covered power similar to above but with larger overall physical dimension to more accurately represent type of wire used on early AC radios. Sold by the foot.

S-W103 2.95

Celanese Covered Wire

White celanese covered. Resembled early cotton covered wire. May be color dyed. Litz wire ideal for loop antennas. Cotton wrap. 20 foot minimum per type.

#24 magnet wire, price per foot	S-W203	\$0.08
#26 magnet wire, price per foot	S-W107	.07
54/38 Strand-Litz Wire, price per foot	S-W106	.12

"Push-Back" Cloth Covered Wire

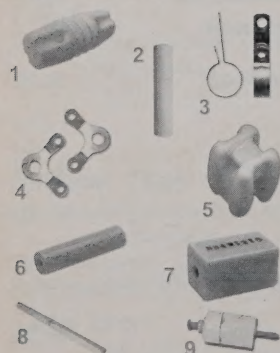
Solid Core push-back hook-up wire. 22 AWG. 20 foot minimum. Sold by the foot.

Black	S-W712	\$0.25
Red	S-W712R	.25
White	S-W712W	.25
NOS Red, cotton covered While Supplies Last	S-W22-RED	.25

Stranded Aerial Wire

Stranded 16 gauge copper wire, not insulated. For outside antennas. 50 foot roll.

S-W32-146 \$6.95

**Insulators**

Description	Part #	Price
Old style insulator for antenna installations, molded plastic ¹	S-H2130	\$1.50
Ceramic form, 2 1/2" long by 1/2" diameter. Both ends with 6-32 threads. Use as standoff or coil/choke form. ²		
	S-H135	1.75
Mounting bracket for above, package of 10 ³	S-H113	.30
Double eyelet for above, package of 10 ⁴	S-H114	.30
Porcelain egg-shaped insulator. 1 1/4" x 7/8"	S-H131	2.75
Porcelain rectangular insulator, 0.7" x 0.7" x 1.2" long, 8-32 threads at both ends. ⁶	S-H132	1.95
Porcelain cylindrical insulator, 3/8" x 1 1/2" long, 6-32 threads on both ends. ⁷	S-H133	1.95
Porcelain Insulator 12" x 1 1/8", made of Steatite ⁸	S-H136	1.50
Antenna nail on knob. Glazed, insulated. Use to attach antenna to exterior of buildings, trees etc. ⁹		
	S-H134	2.50

Magnet Wire

Insulated with two coats of enamel. Perfect for winding coils and transformers.

21 gauge, 100 foot spool	S-WL3-610	\$5.50
22 gauge, 100 foot spool	S-WL3-611	5.50
24 gauge, 200 foot spool	S-WL3-612	5.50
28 gauge, 200 foot spool	S-WL3-614	4.95
32 gauge, 400 foot spool	S-WL3-616	4.95
36 gauge, 750 foot spool	S-W318	4.95

NiChrome Resistance Wire

Use for making wirewound resistors, small heater elements, or repairing filament potentiometers. Available in four sizes. 20 foot minimum.

Ohms/ft.	Gauge	Part #	Price/ft.
2.57	26	S-W500	\$0.19
4.09	28	S-W501	.19
6.50	30	S-W502	.18
20.80	35	S-W503	.18

Old Style Speaker Wire

Brown cloth-covered two-conductor tinsel wire, as found on 20's vintage horn and cone-type speakers. Sold by the foot, terminals not included. See page 61 for phone tips.

P-W413 \$1.75

Early Style Square Bus Wire

#12 AWG Square tinned copper, per 10 feet. S-W140 \$2.95

Bus Wire

#22 solid tinned copper bus wire. Approximately 100' per spool.

S-W428 \$4.25

fax: 480.820.4643 OR 800.706.6789 CUS & CANADA ONLY

Replacement Power Cords

Description	AWG	Cond	Length	Part #	Price
Black, SPT-1, non-polarized, tinned leads ¹	18	2	6'	S-W118	\$1.95
Black, SPT-1, non-polarized, detachable (Panasonic type) ²	18	2	6'	S-W117	1.50
Brown, SPT-1, polarized ³	18	2	6'	S-W104	1.75
Brown, SPT-1, non-polarized, detachable ⁴	18	2	6'	S-W105	1.50
Black, detachable, mates with receptacle P-SP2-106 ⁵	18	3	8'	S-W123	4.50
Black, detachable, mates with receptacle P-SP2-106 ⁵	18	3	12'	S-W124	7.95
Black, with shield ⁶	18	3	6' 7"	S-W121	2.50
Black, non-polarized ⁷	18	2	6'	S-W451	1.50
Black, polarized ⁷	18	2	6'	S-W453	1.95
Black, 13A, molded low profile plug ⁸	16	3	8'	S-W125	4.50
Black, 13A, molded low profile plug ⁸	16	3	12'	S-W126	7.95
Black, SJT, molded plug ⁹	14	3	6' 6"	S-W122	3.50



Retaining Clips

For cheater cords. Package of 10.

S-H117 \$0.25

Strain Relief

Rubber type for standard zip cord.

for 1/4" diameter hole	P-H11-402	\$0.35
Two conductor (SP1)	P-H11-406	.30
Three conductor (fits S-W120)	P-H1100	.30
16/3 SJT, 7/16" cord diameter	P-H1200	.35
HH Smith, right angle, for SPT-1 wire size	W-HHS-825	.35

I.C.E. Power Cord Receptacle

Mates with power cords S-W119, S-W123 & S-W124. Rated for 15A, 250V. UL listed.

P-SP2-106 \$1.75

AC Line Interlock

1 1/4" mounting centers.

non-polarized	P-SP2-K-002	\$0.95
polarized	P-SP2-K-003	.95

AC Cord Plug

Flat, brown phenolic plug, 1 1/2" wide x 1 3/16" deep.

P-SP2-104 \$2.95

Shielding Braid

Tubular, 1/2" diameter. Sold by the foot.

S-W411 \$1.75

Sleeving

1" "expando mesh." Sold by the foot.

S-M100 \$1.25

Heat Shrink Tubing Assortment

Assortment of 2" heat shrink in many colors and sizes. Shrinks to 50% of it's original size.

S-M14 \$1.50

Two Conductor Shielded Cable

Two stranded 24 gauge wires, PVC insulated, cabled with fillers. Bare copper spiral shield. Blue outer insulation. Approximately 1/8" outside diameter. Sold per foot. While Supplies Last.

S-W450 \$0.35

Braided Copper Tubing

Ideally suited for shielding, bonding and grounding of all types of electronic equipment. Available in two lengths.

3/16" x 3'	S-W409	\$1.50
3/16" x 6'	S-W410	3.25

Heat Shrinkable PVC Tubing

Shrinks to half it's original size when heated by heat gun, soldering iron or just a match. Use for insulating terminals, connectors and wire splices. Comes in 6" lengths and quantity shown.

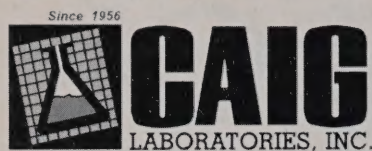
Orig. dia.	Qty/Bag	Part #	Price
.125"	30	S-M12-1044	\$4.50
.187"	27	S-M12-1046	4.50
.250"	23	S-M12-1048	4.50
Assorted	23	S-M12-1080	4.50

Old Style Spaghetti

Black fiberglass sleeving is varnished and closely resembles early style spaghetti. Available in two sizes. 10 foot minimum per size.

20 AWG	S-M436	\$0.50
11 AWG	S-M401	.60

fax: 480.820.4643 OR 800.706.6789 (us & canada only)



All **CAIG** products
are priced more than
10%
below Retail!

DeoxIT

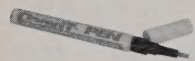
DeoxIT dissolves oxides and sulfides that form on metal contact surfaces, removing these sources of resistance. This restores the contact's integrity and leaves a thin (organic) layer that coats and protects the metals. Special additives prevent the dissolved oxides from re-attaching, keeping them in suspension and allowing them to be easily dispersed by the mechanical action of the contact.

Spray: provides a light (5%) coating of DeoxIT liquid. 5 oz (200ml), flammable until solvent evaporates, adjustable valve. No CFC's/HCFC's.

S-CD5S-6* **\$9.75**

Pump Spray: 50% concentrate solution. Non-flammable. 150ml. May be shipped by air and to Canada!

S-CDP5S-6 **12.40**



Pen Applicator: 100% concentrate. Environmentally safe, non-flammable, non-corrosive, non-toxic.

S-CD100P **13.30**

* Cannot be shipped by air or to Canada.

R5 Power Booster

A unique liquid that improves the flow of electricity on metal surfaces. The best solution for improving and preserving the performance of electrical connections. R5 Power Booster contains active ingredients that dissolve contamination on the metal surfaces, fill in the minute gaps in the metal surfaces and provide long lasting protection from future contamination. Provides a light (5%) coating of R5 Power Booster liquid. 5 oz (200ml) non-flammable, adjustable valve.

S-CR5PS-6 **\$23.10**

PreservIT

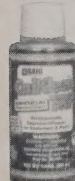
Seals, lubricates and preserves metal surfaces against oxidation and contamination. Use on: clean/new surfaces or those cleaned with DeoxIT. Provides a light (5%) coating. 5 oz (200ml), adjustable valve, no CFC'S/HCFC'S.

S-CP5S-6 **\$9.75**

GaiKleen RBR

Rubber cleaner and rejuvenator. Rejuvenates and cleans all rubber rollers, parts and plates. 59 ml squeeze bottle. 100% solution.

S-CRBR100L-2 **\$8.85**

GaiKleen TRP

Degreaser, Defluxer, Label Remover

Citrus based cleaning solvent for removal of oil, grease, and flux from equipment and parts. Biodegradable, flammable.

New! **S-CDG7S-6** **\$6.20**

GaiLube MCL

Moving contact lubricant. A precision lubricant for moving contact surfaces (faders, switches, potentiometers, and other mechanisms with sliding surfaces). Replenishes lost lubrication from cleaning solutions. 5 oz (200ml), 5% spray.

S-CMCL **\$9.75**

ProGold

ProGold is specifically formulated to improve conductivity and provide long-lasting protection on gold, precious metals and their base metals. It conditions connectors, contacts, and other metal surfaces, thus enhancing the conductivity characteristics to efficiently transmit electrical signals. ProGold's superior formula contains conditioners, deoxidizers, preservatives, conductivity enhancers, arcing and RFI inhibitors and anti-tarnishing compounds. These reduce intermittent connection problems and significantly increase the quality and reliability of electrical components and equipment.

Spray: Provides a light (5%) coating of ProGold liquid. 5 oz (200ml), adjustable valve. No CFC's/HCFC's.

S-CG5S-6 **\$15.98**

Pen Applicator: Environmentally-safe, non-flammable, non-corrosive, non-toxic.

S-CG100P **18.65**

**ProGold GL**

Extended temperature, longer-lasting formula, -45°C to 400°C. Field and lab tested to provide ten years of protection and service life without deterioration, gumming or varnishing. ProGold GL provides superior lubrication, anti-tarnishing, conductivity enhancing and protection to metallic surfaces. Ideal for vacuum tube pins and sockets! Provides a light (5%) coating of ProGold liquid. 5 oz (225ml), adjustable valve. Non-flammable, fast evaporating carrier solvent that is safe on plastics.

S-CGX5S-6 **\$26.65**

FreezALL

Cools circuits to -54°C. Locates intermittent components (capacitors, resistors, transistors, etc.), due to heat failure, hairline cracks on printed circuit boards. Provides low temperature testing of electric circuits. 200 ml spray.

S-CFZ7PS-10 **\$11.50**

CircuitWriter

Circuit Writer precision conductive ink dispenser makes instant traces on epoxy, glass, and metal. Draw traces on circuit boards, design prototype circuits, repair rear-window heater traces. 7 ml pen dispenser.

S-CCW100P **\$12.40**

Accessories
Foam Swabs

100% lint-free open cell urethane foam. Retains lubricant and solvent for light applications. Non-abrasive and chemical resistant. Package of 6.

S-CSWP-6 **\$4.40**

Cleaning Brushes

Nylon brush for cleaning contacts and connectors. Ideal for phone and phono (RCA), XLR, coax connectors and patchbays. Package of 6.

S-CAB-6 **4.40**

Jif Action



Cleans and provides long lasting protection for electronic controls, switches, relays, potentiometers and other components. Stops noise and squeaks. Contains silicone additive.

6 oz.	S-C19-634	\$3.95
16 oz.	S-C19-636	7.50

This item is great for antique radios!

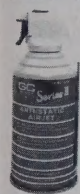
Gold Guard Pen



The pen that cleans and lubricates gold and other noble metal contacts and connectors. Extends the life of noble metal contacts. Chisel tip marker for exact delivery of solvent to surface. While Supplies Last.

S-CCW7400 **\$6.95**

Anti-Static Airjet



Clean hard to reach places. Anti-static formula minimizes static buildup. Blows away dust, dirt and grit without scratching. Contains no ozone depleting chemicals. Non-flammable. 12 oz can.

S-C19-8475SF **\$8.95**

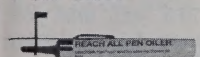
Graphite Lubricant



Dry powdered graphite is the finest lubricant for metal, wood, plastic and rubber. 1 1/8 oz net wt.

New! **S-C19-821** **\$4.50**

Pen Oiler



High quality non-gumming instrument oil. Fine long-reaching metal tube extends and retracts. Use on timers, clocks etc. 0.5 oz

S-C10-984 **\$4.65**

Flux Remover

Removes oil, grease and soldering fluxes. Very effective for cleaning activated fluxes and other ionic contaminants. Product may affect polystyrene, polycarbonate and acrylic parts, test for compatibility. 12 oz.

S-C11109 **\$8.95**

Rubber Revitalizer



Removes "dead" rubber from old rubber surfaces to clean and revitalize idler wheels, belts and pinch rollers. 1 oz bottle.

S-C220 **\$5.25**

Phono Non-Slip



Prevents slippage and restores proper function on belts and drive wheels in turntables and tape recorders, especially where the rubber has hardened or become slick. 2 fl. oz.

S-C10-8602 **\$5.95**

Big Bath



All purpose degreaser and cleaner for electrical contacts, switches, pc boards and components. Evaporates instantly and leaves no residue.

12 oz	S-C19-902	\$8.95
22 oz	S-C19-903	12.95

Little Bath



Hydrocarbon based cleaner/lubricant.
NOTE: Not for use on energized equipment! 4 oz.

New! **S-C19-723** **\$4.75**

De-Ox-Id



Solventless light oil based contact treatment compound counteracts oxidation. 4 oz.

New! **S-C19-1906** **\$6.95**

Red X Corona Dope



Polyester based re-enamel that will not drip or sag. Oil and waterproof. Temperature range to 220°F. For moisture proofing and insulating high voltage coils and components. Dielectric strength. 1700 V/mil min. Dielectric constant 3.7. 12.25 oz.

New! **S-C10-5012** **\$10.95**

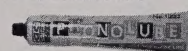
White Lithium Grease



White lithium based grease lubricant. Good for use on wiping contacts and sliding parts. Will not oxidize or harden. 1 3/4 oz tube.

S-C10-2302 **\$3.95**

Phonolube



Light bodied grease made of polymerized oil specially developed for the lubrication of small geared mechanisms. Retains its viscosity over a wide range of temperatures. 2 oz tube.

S-C10-1223 **\$4.95**

Rubber-to-Metal Cement



A heavy-bodied, black rubber based cement with outstanding bonding qualities to many materials such as natural and synthetic rubber, metal, wood and plastics. Dries quickly. Used to cement any rubber or flexible plastic part to cabinets, chassis or panels; also for gaskets, weather strips, etc. 2 fluid oz bottle with brush.

S-C10-352 **\$9.95**

Service Cement



A quick drying waterproof clear adhesive which forms a strong vibration resistant bond. Ideal for speaker repairs and bonding semi-porous materials to each other or to metals, plastics, etc. 2 oz bottle.

S-C10-302 **\$5.95**

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Fresh Stock Energizer Batteries

Advanced formula Alkaline Batteries. Unsurpassed performance in high tech devices. It keeps going, and going, and going...

Four pack of AA batteries	S-Z4AA	\$3.50
Two pack of 9 Volt batteries	S-Z29V	5.45
Four pack of C batteries	S-Z4C	5.50
Four pack of D batteries	S-Z4D	5.50
Four pack of AAA batteries	S-Z4AAA	3.75

**Eveready Batteries**

The following Eveready batteries are useful for powering portable radios like the Zenith Transoceanic, subminiature tube radios, and early transistor radios. The S-Z415 is used in our K-436 Regenerative Radio Kit.

Number	Volts	Size	Part #	Price
276	9	2.56" x 2.03" x 3.16"	S-Z276	\$13.95
412	22.5	1.05" x 0.63" x 1.80"	S-Z412	6.95
415	45	1.05" x 0.63" x 3.69"	S-Z415	13.95
455	45	2.66" x 1.00" x 3.69"	S-Z455	19.95
416	67.5	1.25" x 0.94" x 3.38"	S-Z416	19.95
467	67.5	2.81" x 1.38" x 3.71"	S-Z467	29.95

2 "C" Cell Battery Holder

S-H156 \$0.75

Battery Connectors

Snap connectors for the Eveready battery No. 276, 455 and 467. Contains one set of male and female connectors. No leads, current production. While Supplies Last.

S-H153 \$1.25

9 Volt Clips

Package of 3. Clips can also be used on S-Z415 and S-Z416.

S-H155 \$0.75

Insulating Cambric

Yellow varnished cambric .010" thick, used in switches, under terminals, in transformers, field coils, chokes etc. Dielectric strength 5,000V 9" wide roll contains 210 sq. inches.

S-M549 \$5.60

Four "AA" Cell Holder

S-H157 \$0.45

Fish Paper

Gray insulating paper .010" thick, used in switches, under terminals, in transformers etc. where mechanical strength is required. Dielectric strength 3,000 volts. 9" wide roll contains 250 sq. inches.

S-M560 \$4.95

Color Burst Crystal

RCA type 3, 3579.545 kc. Excellent for ladder filters.

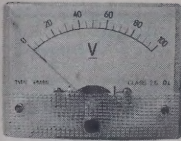
S-MCBX \$0.19

Plastic Bags Protect Valuable Literature!

9" x 12" .0015 gauge clear flat plastic bags are ideal for protecting and displaying early magazines, pamphlets, booklets, literature etc. Package of 100 bags.

S-B703 \$6.95

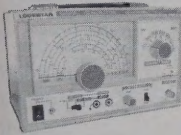
Panel Meters



80mm wide x 64 mm high (~3 1/8" x 2 1/2") white face. Fits in 2 3/8" round panel cut out. 2 1/2% accuracy.

Range	Part #	Price
0-100 uA DC	S-PMD100UA	\$9.95
0-1 mA DC	S-PMD1MA	9.95
0-100 mA DC	S-PMD100MA	9.95
0-1 A DC	S-PMD1A	8.95
0-10 V DC	S-PMD10V	9.95
0-100 V DC	S-PMD100V	9.95
0-150 V AC	S-PMA150V	9.95

RF Signal Generator



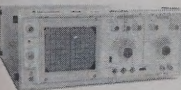
Compact solid state RF signal generator designed for the hobbyist, service bench and technical instruction. The generator is most suited for checking and aligning the IF circuit and tuners in AM, FM, and TVs. 100KHz to 150MHz in 6 bands and up to 450MHz on third harmonics. 5.9" high x 9.8" wide x 5.1" deep. 8 lbs.

Features:

- Wide frequency range - 100KHz to 150MHz
- With 1 KHz oscillator purpose of modulation
- High stability
- Output control - 0dB/-20dB/-40dB and fine adjuster
- Frequency accuracy - $\pm 5\%$
- RF output - 100mV rms appx (up to 35MHz unloaded)
- Output control - High-low switch, fine adjust
- Audio output 1KHz min., 2V rms
- Modulation - Internal - 1KHz (AM) 30% appx.
- External - 50Hz ~ 20KHz at < 1V rms input

S-MRFGEN \$159.95

Oscilloscope



Model OS-701 OB is a compact general purpose oscilloscope with wideband, DC to 10 MHz, and high vertical input sensitivity 10 mV/cm characteristics.

The time base sweep rate is designed between 1 μ s/cm to 1 ms/cm. Built in fine controller for easier operation. Automatic TRIG control. Engineered for maximum usefulness in laboratories, production lines, as well as in monitoring of instruments. 6" high x 14" wide x 15" deep, 22 lbs. While Supplies Last

S-MOS-701OB \$349.95

Audio Generator



The oscillation frequency range of this audio generator is between voice frequency band and super voice frequency band. Its main function is to measure the characteristics of an audio circuit. Square and sine wave. 10K ohm input impedance, 10V rms maximum input voltage. 600 ohm output impedance. Equipped with synchronized input terminals, enabling the high power output signals to be accurately controlled by small signals. Comes with test lead and ground lead. 5.9" high x 9.8" wide x 5.1" deep. 8 lbs.

Features:

- High frequency stability: within ± 2 Hz
- Frequency range - 10Hz ~ 1MHz, 5 decade bands
- Accuracy - 10Hz ~ 1MHz - $\pm 5\%$ + 2Hz
- Output control - 0dB/-20dB/-40dB and fine adjuster
- 100Hz ~ 100KHz $\pm 3\%$ + 3Hz
- Output Voltage Floating: within ± 1.5 dB

Sine Wave Output

- Range - 10Hz ~ 1MHz
- Output voltage- 8V rms max.
- Output distortion- < 0.05% - 500Hz ~ 50KHz

Square Wave Output

- 10Hz ~ 100KHz
- 15V p-p
- < 0.5% - 50Hz ~ 500KHz

S-MAFGEN \$159.95

Capacitor Tester



This audible capacitor checker is designed to make capacitor testing fast and easy. Allows you to check for bad or leaking capacitors without removing capacitor from circuit, although you must disconnect one lead. (Cap must be discharged) Audible tone allows you to determine if capacitor is good, shorted or leaking. Can also be used to check diodes. Made in USA. 0.4 lbs.

S-ZTIF660 \$37.95

Signal Tracer/Injector



Handy, easy-to-operate versatile instrument with dual power source (9V battery or AC adapter). Two red LEDs on front panel indicate the mode of operation. Ideal for servicing on TV, AM and audio circuitry, plus checking of speakers, microphones and pick-ups. 100 μ A meter, 2 1/4" speaker 7.8" W x 5.5" H x 3.9" D. 3 lbs.

Features: Tracer Portion

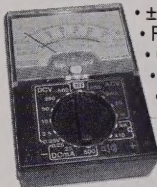
- Gain - Max. 60dB at 1KHz
- Attenuation: 0-20-40-60 dB
- Input impedance: 100K ohms
- RF output: 100mV rms appx (up to 35MHz unloaded)
- Output impedance: Output - 600 ohms (unbalanced) - External speaker - 8 ohms

Features: Injector Portion

- Frequency: appx. 1KHz square wave form
- Output level: 4.5V p-p max., 0 - 4.5 continuously variable

S-SIGTR \$139.95

General Purpose VOM with Multifunction



- $\pm 0.4\%$ DC Accuracy
- Fuse & Diode Protection
- Continuity Buzzer
- 500V AC/DC
- AC/DC Input Impedance 4K ohm/Volts

0.3 lbs

While Supplies Last

S-Z14A

\$19.95

Digital Multimeter



Ergonomically Designed. Uses one 9V battery, included.

- 0.5% basic DC accuracy
- 3 1/2 digit LCD, 0.625" high
- 1.5" x 3" x 7.5" (w/o case)
- capacitance to 20 mFD
- frequency to 10 MHz
- 10 A (AC Or DC)
- h_{FE} and diode test
- audible continuity test
- 10M ohm input resistance
- overload protection
- polarity indicator
- over range indicator
- low battery indicator
- tilt stand and case

1.6 lbs

S-Z3220

\$49.95

Digital Capacitance Meter



Nine ranges give precision readings from .1pF to 20,000mFD. Can be used to check virtually all capacitors for tolerance value, selecting matched sets, etc.

- 0.1 pF to 20,000 mF, 9 ranges
- 0.5% basic accuracy
- 3 1/2 digit LCD, 1" h x 2 1/4" w
- Zero adjustment
- Input protected
- Low battery indicator
- Over range indicator
- Tilt stand
- 1.5" x 2.8" x 6"
- Includes, case, leads, battery, spare fuse and instructions.

1.1 lbs

S-Z150

\$59.95

Analog Multitester - Philips ECG AM14



Pocket size 6 function, 14 range meter.

- $\pm 4\%$ DC accuracy
- 2 1/4" mirrored scale
- Jeweled meter movement
- 10K ohms/VDC, 4K ohms/VAC
- input sensitivity
- Fuse and diode protection
- Battery test - 1.5V & 9V
- Color coded scale & panel
- 2 1/2" x 4" x 1 1/4", 5oz.
- Includes battery, test leads and instruction manual

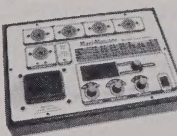
While Supplies Last

0.4 lbs

S-Z230

\$14.95

Maxi-Match Digital Tube Tester



Standard tube types testable:

6L6, 5881, EL34, 6V6, 6550, 6CA7, 7581, KT66, KT77, KT88, KT90, KT100

Types testable with optional adapters:

EL84/6BQ5, 7027, 7591, 7868, 807, 811, 845

Plate Voltage:

Selectable 325 & 400

Bias Voltages:

-60, -48, -36, -24, -12

Filament Voltage:

6.3 VAC

AC input:

120 vac, 75 watts maximum input power

10 lbs

Amps

6 A

S-Z240

\$495.00

fax: 480.820.4643 OR 800.706.6789 (us & canada only)

Weller Controlled Output Professional Soldering Station

- Input voltage: 120
- Output voltage: 24
- Power Consumption: 60W
- Unique closed loop method of controlling maximum tip temperature - protects temperature sensitive components

• A ferromagnetic temperature sensor in the tip controls tip temperature - no adjustments are necessary

• Lighted switch

• Tips available in 700°F and 800°F ranges

• Tips Determine Temperature (1/16" Screwdriver 700°F tip S-TPTA7)

S-TWTCPT \$137.95

Weller Variable Power Soldering Station

- Input Voltage: 120
- Output Voltage: 120
- Power Consumption: 5 - 40 watts
- Temperature Range: 900°F max

• On/Off switch with "power-on" indicator light

• Variable control produces 5 to 40 watts

• Natural sponge tip cleaning pad

• Ideal for hobbyist, DIY'ers and students

• Includes 1/8" screwdriver tip (S-TST3)

S-TWLC100 \$49.95

Weller Soldering Iron

- Input Voltage: 120
- Power Consumption: 35 watts

• Tip Temperature: 850°F

• Heating Element Type: Nichrome wound, fiberglass and ceramic insulated

• Lightweight handle with cushion grip for ease of use and comfort

• Comes with 1/8" screwdriver tip (S-TST3)

• Stand (S-TPH60) sold separately (see below)

• Three wire grounded power cord for your safety

S-TWP35 \$43.95

Weller Marksman Soldering Iron

- Input Voltage: 120
- Power Consumption: 40 watts

• Tip Temperature: 900°F

• Heating Element Type: Nichrome Wound, fiberglass and ceramic insulated

• On/Off indicator light

• Includes 1/4" chisel tip (S-TMT10)

S-TSP40L \$17.95

Weller Cordless Soldering Iron Kit

- Professional quality Portasol® self-igniting heat tool
- Ideal for soldering, heat shrinking or rope cutting
- Butane fuel level is visible through a window on the body of the tool

• Built in fuel filter reduces contaminated fuel problems

• Auto switch safety shut off on the cap

• Operates up to 2 hours per refill

• Temperature is adjustable to 1076°F

• Kit contains PSI100 iron, sponge, stand and extra tips, all packed in a plastic case

• Butane lighter gas (not included)

S-TPSI100K \$92.95

Weller/Unger Heat Gun, 1000 Watts

Dual temperature, heat gun is ideal for:

- Applying heat shrink products
- Curing epoxy and softening adhesives
- Softening and molding plastics
- Heating liquids and stripping paint

• Drying, thawing frozen pipes

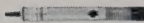
Features:

• Dual temperature - 1200°F (1000w) and 790°F (400w)

• 3 way switch: Hi - Off - Low

• 3 wire grounded plug, 6' power cord

S-T1095 \$54.95

Weller Manual Desoldering Pump

• One hand operation with spring loaded piston provides ESD safe solder removing vacuum

• Self cleaning, non clogging, static free replaceable tip

S-T7874B \$21.25

Weller Bulb Solder Off

Help remove solder. Old style solder sucker.

S-T7805 \$8.95

Replacement Tips for S-TWTCPT

• Tips are solid copper plated with iron all over, and nickel and chromium behind the working surface

• Designed to provide maximum heat transfer from the heater to the tip

Description	Part #	Price
1/16" Screwdriver tip, 700°F	S-TPTA7	\$6.10
1/16" Screwdriver tip, 800°F	S-TPTA8	6.10
1/8" Screwdriver tip, 700°F	S-TPTC7	6.10
1/8" Screwdriver tip, 800°F	S-TPTC8	6.10
Conical tip, 700°F	S-TPTP7	6.10
Conical tip, 800°F	S-TPTP8	6.10

Replacement Tips for S-TWLC100 and S-TWP35

• Tips are solid copper with iron all over, and nickel and chromium behind the working surface

• Designed to provide maximum heat transfer from the heater to the tip

1/16" Screwdriver tip	S-TST1	\$5.50
1/8" Screwdriver tip	S-TST3	5.50
Conical tip	S-TST7	5.50

Replacement Tips for S-TSP40L

• Tip is solid copper, nickel plated and tinned

1/4" Chisel tip	S-TMT10	\$7.10
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Replacement Tips for S-TPSI100

Description	Part #	Price
1/8" Single flat, up to 850°F	S-TPSI3	\$10.50
1/32" Single flat soldering tip, up to 850°F	S-TPSI5	10.50
Hot knife tip, up to 850°F	S-TPSI10	10.50

Accessories for S-T1095

Reducer - use for concentrating heat	S-T1080	\$6.50
Reflector - use for heat shrink tubing/caps	S-T1082	6.50

Replacement Tips for S-T7874B

S-T7875B \$4.50

Weller Bulb Solder Off Replacement Tips

For S-T7805 **S-T7851 \$4.75**

Weller Soldering Iron Stand

S-TPH60 \$21.95



Xcelite 6" Electrical Pliers



- For copper and aluminum wire 10-22 AWG
- Wire cutting and stripping edges
- Needle nose pliers add wire pulling and bending capabilities

• Scissors action stripper for cleaner, faster stripping

• Red cushion grips

• Serrated jaws

S-T105CG

\$12.95

Xcelite 4" Relieved Tapered Head Cutters



- Diagonal cutting pliers
- Relieved tapered head flush cutter
- Allows use between closely spaced components
- Green cushion grips

S-TMS543J

\$15.25

Xcelite 5" General Purpose Shearcutters



- Low profile, general purpose cutter
- Flush cuts soft wire up to 20 AWG (0.8 mm)
- Superior blade by-pass shear cutting action
- Greatly reduced mechanical shock delivered to the work
- Light blue grips

S-T170M

\$5.25

Xcelite 5" 60° Curved Needle Nose Pliers



- Thin tip
- Smooth jaws
- Green cushion grips

S-TCN255

\$18.95

Xcelite 5.5" Serrated Jaw Pliers



- Thin profile long reach pliers for access into tight spaces
- Lightweight for maximum comfort
- Light blue grips

S-T378M

\$9.25

Xcelite 6" Long Needle Nose Pliers



- Extra long nose
- Serrated jaws
- Green cushion grips

S-TNN776

\$16.95

Xcelite Seizer Forceps



- Clamps firmly to hold wires for soldering
- Acts as a heat sink and retrieves small parts from hard to reach places

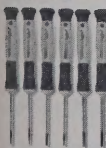
• Precision machined tempered stainless steel

• Serrated jaws

S-T42H

\$6.75

Xcelite Precision Electronic Screwdriver Set



Set contains one each of:

- 1.5 mm x 60 mm slotted tip screwdriver
- 2.0 mm x 60 mm slotted tip screwdriver
- 2.5 mm x 60 mm slotted tip screwdriver
- 3.0 mm x 60 mm slotted tip screwdriver
- #0 point Phillips tip screwdriver

• #00 point Phillips tip screwdriver

Features:

• Chrome-molybdenum vanadium steel blades

• Black oxide tips for longer wear life

• No-roll handle design keeps drivers from rolling off uneven surfaces

• Includes storage case

S-TXP600

\$24.95

Crescent® Six Piece Screwdriver Set



• Industrial strength blades for rugged performance

• Molded handle for gripping comfort

Each set contains one each of:

3/16" x 3" slotted

3/16" x 6" slotted

1/4" x 4" slotted

1/4" x 6" slotted

#1 x 4" Phillips

#2 x 4" Phillips

S-TLCC1006

\$5.75

Nicholson Hobby Assorted File Set



• Selection of 6 miniature files with fine cut for intricate work

• Includes vinyl case

• Ideal for handicrafts and hobbies

S-T42030

\$26.95

Erem High Precision 4.75" Tweezers



• Stainless steel

• Anti-Magnetic

• Flat, round tip

S-T2ASA

\$3.35

Erem High Precision 4.5" Tweezers



• Stainless Steel

• Anti-magnetic

• Super fine tip

S-T5SA

\$3.35

Erem High Precision Curved 4.75" Tweezers



• Stainless Steel

• Curved for easy manipulation in confined areas

• Precision Point

S-T7SA

\$3.35

Greenlee Chassis Punches



Round hole punches for use in mild steel up to 16 gauge.

Make professional chassis punches on your projects.

Absolutely no returns unless punch is defective!

1/2"	S-T703012	\$32.95
5/8"	S-T703058	38.95
1 1/16" While Supplies Last	S-T7031116	39.95
3/4"	S-T703034	44.95
1"	S-T703100	43.95
1 1/8"	S-T703118	49.95
1 1/4"	S-T703114	49.95

These punches are available for rental. Please call.

Test Lead Kit (Mil Spec)



Contains:

• Two alligator clips

• Two spade lugs

• Two pin jacks (long)

• Two pin jacks (short)

• Two probe tips

• Two tip insulators

• Two universal test jacks

All included with threaded ends (male). Also contains two 54" leads with threaded ends (female). All "rolled up" in a convenient pouch. Sealed in foil military package. The ultimate set of test leads!

S-Z5R542

\$17.95

Resistance Wheel



Rotate dial to select resistor for best circuit operation. Uses

1/4 watt 5% resistors covering 5 ohms to 1 megohm. With insulated alligator clips.

S-Z20-104

\$21.95

fax: 480.820.4643 OR 800.706.6789 (us & canada only)

Deluxe Nibbling Tool

Cuts metal and non-brittle plastic. Will cut any size and shape of hole from the edge or from a $\frac{3}{16}$ " inside hole. Cuts steel up to 18 gauge as well as copper, brass, aluminum and plastics up to $\frac{1}{16}$ ". Spring operated.

S-T806 \$12.95

Tube Pin Straightener

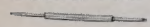
7 and 9 pin straightener, mounts on work bench. Limited quantity.

S-T8655 \$8.95

Contact Burnishing Tool

Stainless steel strip, microscored to an ultra-fine file surface. Remove oxide and corrosion on contacts made of platinum, palladium, molybdenum, gold, tungsten and silver.

S-T9338 \$1.95

Solder Aid Tool

Stainless steel, solder will not stick. 6 $\frac{1}{2}$ " long with plastic handle. Forked tip on one end, straight reamer on the other.

S-T9075 \$3.95

Solder

60/40 rosin core type in convenient, clear plastic, self-feed dispenser, or 1 lb spool.

Standard .050" diameter, 6 $\frac{1}{2}$ " length **S-TH3-390 \$2.95**

Fine line .032" diameter, 12" length **S-TH3-391 3.50**

.050" diameter, 1 lb spool **S-T9000 11.95**

Desoldering Braid

Made of finely-woven copper braid impregnated with pure rosin flux, for high efficiency and maximum solder holding capacity. 5' dispenser spool.

.08" wide **S-T22-405 \$3.25**

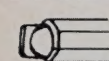
.15" wide **S-T503 4.95**

Long Reach Pliers

Great for getting into hard to reach places. While Supplies Last.

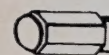
11" 45° bent nose **S-T56926 \$9.95**

11" 90° bent nose **S-T56928 9.95**

Double End Hex Tool While Supplies Last

Molded from Delrin, 5 $\frac{1}{2}$ " long. Ends are .125 hex with .10" wide by .02" thick plastic screw driver on one end.

S-T9091 \$1.95



Same as above, but with .100" hex.

S-T702 2.25

Duplex Aligner

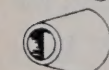
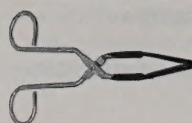
Butyrate shaft 6 $\frac{1}{8}$ " long with $\frac{1}{8}$ " wide steel tips. Tip on one end recessed.

S-T8276 \$2.50

**3-in-1 Hex Core Tool**

Molded from Celcon, 5 $\frac{7}{16}$ " long. Stepped hex .078" to .100". Undercut end .100" hex to reach bottom slug in coils.

S-T9302 \$2.50

**Tube and Parts Extractor**

Straight jaws for firm grip, spring steel construction, nickel plated, insulated jaws.

S-T5092 \$6.50

Alignment Tools

Professional tool made of Tenite, 5 $\frac{1}{8}$ " long shaft, $\frac{3}{8}$ " diameter with tapered ends.

S-T8609 \$2.50

Hex tool, 5 $\frac{1}{8}$ " long, .1" hex end, .075" flat end.

S-T9303 .95

Hex Tool

.075" Hex on each end of tool.

S-T704 \$9.95

Heat Sink

Absorb heat during soldering/desoldering sensitive parts. 2 $\frac{5}{8}$ " long, high carbon steel, hardened and with PVC coating in handle.

S-T156 \$1.95

11 Function Multi-Purpose Tool

- Clamp
- AWG 22-10 Wire Stripper
- 0-3mm wire loop

- Soft wire cutter (Cu, Al)
- Bolt cutter, 4-40 to 10-32
- Steel wire cutter, 0-3mm
- Insulated terminal crimp, 10-22 AWG
- Non-insulated terminal crimp, 10-22 AWG
- Solid wire cutter
- Ignition terminal crimp
- Flag terminal crimp

S-T203 \$8.50

Alignment Tool Kit

Contains five different tools for all standard adjustments. Includes "Extend-It" for long reaches. Tools are Delrin packaged in pocket-saver pouch. Tools are: 8282 Zenith type, 8606 Hex wrench, 9091 Hex core tool, 9304 double end tool.

S-T8454 \$7.95

Nylon Alignment Tool Kit

Assorted hex and flat tools for alignment work.

S-T9304 \$1.75

Alignment Tool Kit, CB

Contains 5009 Duplex no-metal screwdriver, 5097 K-tran tool, 8271 core aligner, 8282 Zenith alignment tool, 9091 hex iron core tool, 9440 transistor tool, 8276 Duplex aligner and 9304 double end tool.

S-T18-530 \$11.95

Jumper Wire Set

Heavy duty test leads 22" long with insulated alligator clips. Contains one each of black, red, white, green and yellow jumpers. Set of five.

S-ZJ4-655 \$6.95

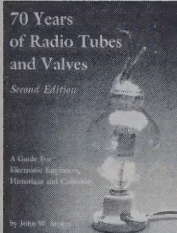
Stainless Steel Cleaning Brush

High quality brush with flexible bristles made of stainless steel. 8" long, laminated wood handle. Made in USA, not a cheap import.

S-T123 \$3.50

We have an extensive selection of books, literature, videos and software dealing with vacuum tubes, radio collecting, guitar, audio and electronic instruction. For any "B"- only (Any part number beginning with the letter B) order of \$20.00 or more, we will waive the \$2.50 handling fee. Also, ask about our damaged books. We have some titles with slight damage which we offer at 20% below prices shown in the catalog.

Vacuum Tubes



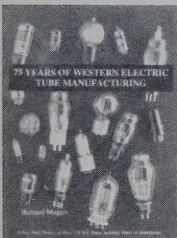
70 Years of Radio Tubes and Valves: Second Edition

By John W. Stokes

Here is the story of the thermionic vacuum tube from its beginning in 1883 and continuing through 1960. It traces the evolution of radio receiving tube design in Britain, Holland, Germany, Canada and Australia, as well as the United States. Company history is presented for DeForest, Ken Rad, Western Electric, Mazda, Mullard, Ediswan, Philips, MOV Valve, Raytheon, Sylvania, GE, Philco, Marconi, Telefunken, Tung-Sol and others. The Second Edition features a new chapter on tubes for audio applications, with 20 additional photos and reproduced magazine ads. Also included is a new index by tube number, facilitating easy access to the information on over 1300 types discussed in this book. 264 pp, 2.0 lbs. 8.5" x 11"

B-765

\$29.95



75 Years of Western Electric Tube Manufacturing

By Bernard Magers

A Log Book history of over 750 WE tubes. A comprehensive listing of all WE tubes manufactured during their 75 year history. Includes dates of manufacture, description, equipment used in, materials, a summary of tube parameters and manufacture discontinued date. Also covers early history of the Western Electric Co. and their tube activity. Contains hundreds of tube illustrations. Written by a former Western Electric Senior Engineer. 144 pp, 1.0 lb 8.25" x 10.75"

B-634

\$18.95

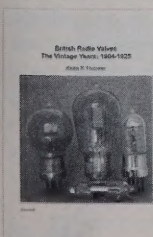


1937 Sylvania Tube Manual

Re-print of 1937 tube manual has pin out diagrams and specifications on tubes manufactured by Sylvania in 1937. Tube types range from 01A and X99 to 6K7. Includes 10 pages of general tube information as well as a section of typical radio receiver and amplifier circuits of the day. 183 pp, 0.7 lb 5.5" x 9"

B-764

\$12.95



British Radio Valves The Vintage Years: 1904-1925

By Keith Thrower

Includes background on the manufacturers and suppliers; Fleming diodes; Marconi-round valves; valves produced for the armed services; and more. Extensive references, with data on 475 types. 100 plus black and white photos. Indexed, 148 pp, 1 lb 7.5" x 10.5"

New Lower Price

B-840

\$29.95



The Ballast Tube Handbook

By A.P. Jacobi

A comprehensive collection of ballast tube data, newly revised and expanded to include a 53 page section on ballast tube substitutions. Lists over 4000 tube numbers. 120 pp, 0.9 lb. 8.5" x 10.75"

B-573

\$10.95



Collector's Vacuum Tube Handbook Vol. 1

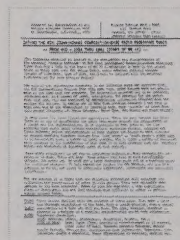
By Robert T. Millard

This book contains hard-to-find electrical data on nearly 200 tube types that pre-date the RMA (Radio Manufacturers Association) standardized numbering system, which was initiated in 1934. It includes basing diagrams, photos of tubes and boxes, and brief developmental histories of each. Western Electric, DeForest, Arcturus, Cunningham, GE, Westinghouse, Philco, Speed, Ken-Rad, Sparton, Cardon, Daven, McCullough, and others are among brands covered.

New!

B-883

\$25.95



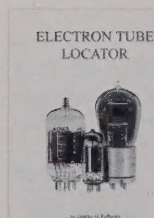
Dating the RCA (Cunningham) Composition-Base Tubes

By Brother Pat Dowd

A comprehensive paper based on RCA engineering bulletins covering the marking details and date coding of the tubes manufactured between 1924 and 1941. 13 pp, 0.3 lb 8.5" x 11"

B-343

\$3.95



Electron Tube Locator

By George H. Fathauer

A comprehensive listing of receiving, transmitting and industrial tube types manufactured in the U.S. and Europe with references to sources of complete data. Includes tube functions, filament/heater characteristics and basing diagrams. Lists approximately 12,000 different tube types. Contains over 300 pages of data and diagrams. 326 pp, 1.5 lbs 8.5" x 11"

New Lower Price

B-662

\$27.95

fax: 480.820.4643 OR 800.706.6789 (us & canada only)

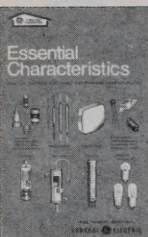
ELECTRON TUBE
RESUME**Electron Tube Resume**

By George H. Fathauer

An abridged version of the "Electron Tube Locator" covering the designation system used by major tube manufacturers in the U.S. and Europe. Includes equivalent tables for U.S. VT types and early Navy types. 30 pp, 0.3 lb. 5.5" x 8.5"

B-672

\$4.95

**G.E. - Essential Characteristics**

The 1973 edition of G.E.'s tube data book, giving all the characteristics starting with 00A and 01A. Includes foreign to American tube interchangeability chart, industrial/military cross reference, picture tube data and basing diagrams. Also entertainment semiconductors.

473 pp, 1.3 lbs 5.5" x 8.5"

B-377

\$14.95

Principles of Electron Tubes

By Herbert J. Reich

First appeared in 1941 as a textbook for beginners studying tube technology. Includes physical concepts, thermionic emission, grid controlled high vacuum tubes, circuit analysis, amplifier design and much more. A must for any library.

398 pp, 1.5 lbs 6" x 9"

B-693

\$34.95

Radio Tube Manual

Reprint of early manual giving data and basing diagrams on tubes from 00A through octals and loctals. Includes types BA and BH, Sparton 182B and 183, and 2 pages on early Western Electric types. 35 pp, 0.3 lb 5.25" x 8.5"

B-337

\$5.95

Radio Tubes and Boxes of the 1920's

By George A. Fathauer

George Fathauer captures the excitement and intrigue of that first decade of home radio through a pictorial presentation of the radio tubes of the era. With over 400 photos and illustrations of early tubes, it shows the colorful packaging and sometimes unusual construction features employed by tube makers to market their products to the public. Collectors and historians alike will appreciate this entertaining way of revisiting the early days of the electronics industry in the United States. 1 lb 5.25" x 8.25"

B-824

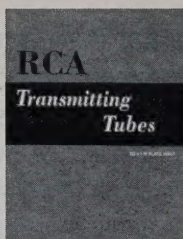
\$26.95

RCA Receiving Tube Manual RC-19

A high quality reprint of the 1959 RCA Receiving Tube Manual (Technical Series RC-19). Includes receiving and picture tube characteristics, basing diagrams, and outline drawings. 380 pp, 1.0 lb 5.25" x 8.25"

B-654

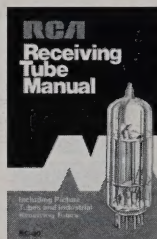
\$12.95

**RCA Transmitting Tube Manual**

A high quality reprint of the RCA Transmitting Tube Manual TT-5, it includes tubes up to 4kw plate input. Includes technical data, outlines and typical circuits. 316 pages, 0.9 lb 5.25" x 8.25"

B-676

\$14.95

**RCA Receiving Tube Manual RC-30**

A high quality reprint of the 1973 RCA Receiving Tube Manual (Technical Series RC-30). Includes tubes not found in RC-19, for example: 6CA7/EL34, 5AR4/GZ34, 6DJ8, 6DN7, 6LF6, 6KG6A/EL509, 6550, 7189, 7591 and the 7868 to name a few. Also includes pictures and industrial receiving tubes. 760 pp, 2.0 lbs 5.25" x 8.25"

B-822

\$24.95

Tube Data Book Set

Want all the tube specifications and cross references? Buy the following 4 books and save almost 15%! 3 lbs.

B-377 GE Essential Characteristics

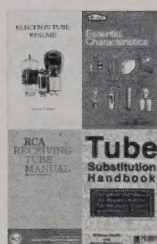
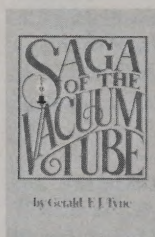
B-654 RCA Receiving Tube Manual (RC-19)

B-825 Tube Substitution Handbook

B-672 Electron Tube Resume

B-DATABOOKS

\$44.95

RADIO TUBE
MANUAL**Saga of the Vacuum Tube**

By Gerald F.J. Tyne

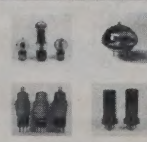
The most comprehensive history of the thermionic vacuum tube. Contains hundreds of photos and essential facts to assist in identifying tubes made prior to 1930, and traces the evolution of tube development with histories of the manufacturers. Truly a classic! 494 pages, 1.4 lbs. 5.5" x 8.5"

B-376

\$19.95

Tube Lore

A REFERENCE FOR USERS AND COLLECTORS

**Tube Lore:****A Reference for Users and Collectors**

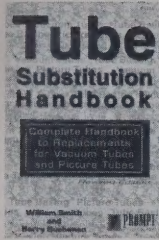
By Ludwell Sibley

For the serious tube enthusiast: a collection of tech data, history of design trends, notes on equivalents, stocking-up hints, "where-used" information, etc. Describes regular grided tubes used in radios, audio amplifiers, and communications gear, plus the unique types in radar and other special applications. Includes

30 page chapter on Western Electric. Has material unavailable in conventional tube manuals: hints on identifying, dating, testing, reactivating, etc. Does not have detailed specs or curves. 186 pp, 1.0 lbs 8.5" x 11"

B-748

\$19.95



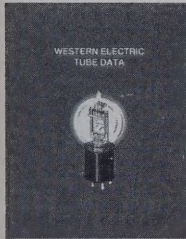
Tube Substitution Handbook
Revised Edition

William Smith and Barry Buchanan

This is the most accurate, up to date guide available to determine direct substitutions for receiving tubes and picture tubes. 149 pp, 0.5 lbs 6" x 9"

B-825

\$19.95



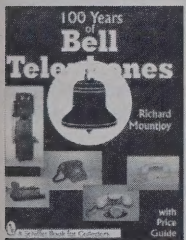
Western Electric Tube Data

Hard-to-find data for 44 Western Electric tube types (205D, 300B, 350B, etc.) popular for audio use and early tube collecting. Includes pictures of tubes and complete operating characteristics and curves. 240 pp, 1.5 lbs 8.5" x 11"

B-659

\$19.95

Antique Telephones



100 Years of Bell Telephones

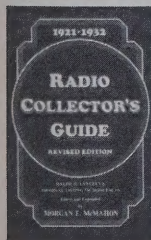
By Richard Mountjoy

From the Coffin sets of the 1870's to the Princess phones of the 1960's and beyond, this book explores the technology and the history of the telephone. Because the Bell Company was the sole source for much telephone technology until very recently, much of the public access to this information has been quite limited. This definitive work will end much uncertainty by providing a vast amount of information never before published. Design changes are carefully chronicled with 350 color photographs. For those who are restoring a telephone and would like to ensure its historical accuracy, this book will make it easy to match pieces correctly. 175 pp, 1.9 lbs 8.5" x 11"

B-730

\$29.95

Radio collecting



1921-1932 Radio Collector's Guide

By Morgan E. McMahon

Lists key information on over 9,000 radio receivers made by some 1,200 companies prior to 1933. Gives manufacturer, year, original price, cabinet type, and technical information. 262 pp, 0.8 lb 5.25" x 8.25"

B-306

\$11.95



1940 E.H. Scott Radio Laboratories Catalog Reproduction

Reprinted by Kent King. Reproduction of the full line catalog of custom built receivers from E.H. Scott Radio Laboratories. Includes the revolution of the time, FM reception. Has several custom built radios and cabinet illustrations and a technical summary of Scott receivers. 32 pp, 0.3 lbs 8.25" x 10.75"

B-775

\$12.95



A Family Affair

The R.L. Drake Story

By John Loughmiller, KB9AT

Here is the behind-the-scenes story of the famous R.L. Drake Company, focusing on the glory days, when Drake was king in amateur radio. Every ham and shortwave listener knew R.L. Drake from the outside, but now the inside story of this incredibly interesting company is told. This book also includes a huge section of useful circuits and modifications for many Drake radios. This 300 page book is both an interesting read and a great technical reference. 288 pp. 2.1 lbs 8.5" x 10.75"

New!

B-875

\$29.95



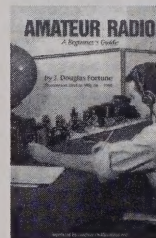
A Flick of the Switch

By Morgan E. McMahon

A companion volume to Vintage Radio 1887-1929, this book continues with the history of radio into the beginnings of Television. Over 1000 pictures. 300 pp, 0.8 lbs 5.25" x 8.5"

B-305

\$11.95



Amateur Radio: A Beginner's Guide

By J. Douglas Fortune

Written for the beginner in amateur short wave transmission who is having difficulty getting started. It contains enough fundamental theory and detail to construct a first class amateur transmitter in easy stages, along with a reference chapter for quick, detailed reference as needed. 153 pp. 1 lb 5.5" x 8.5"

New!

B-863

\$9.95



Antique Secrets - How the "pickers" find treasure... in another man's trash

By Joe Willard

This book teaches you the secrets of negotiating profitable deals, knowing when to sell, and where to find the treasures others don't even realize they have. Beginners and experts alike will find down-to-earth advice that is sure to improve both the readers knowledge of the market and skill level. With the right information, anyone can learn how to pick out the treasures others simply overlook. 192 pp, 1 lb 6" x 9"

B-835

\$14.95



Antique Wireless Association Review, Vol. 11

Includes papers on all of the Scott receiver products, a comprehensive survey paper on National Company sliding coil receivers plus two other shorter papers of historical interest. 200+ illustrations including pictures of early military RT gear. 234 pp, 1.2 lbs 6" x 9"

New Lower Price!

B-799

\$19.95

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fax: 480.820.4643 OR 800.706.6789 (us & canada only)

Antique Wireless Association Review, Vol. 13

The lead article is by well-known Canadian AWA member Robert Murray, who explores in depth the Canadian Northern Electric manufacturing company and its radio products. Additional articles on: The Marconi Company, patent 7777, radio direction finding in WWII, and early radio stations. 160 pp. 1 lb 6" x 9"

New! B-867**\$19.95****Behind the Front Panel**

By David Rutland

This book traces the design and development of 1920's radio from the advent of the vacuum tube to the first AC set. Detailed explanations are provided for regenerative, neutrodyne, TRF, reflex, superheterodyne, and other circuits. Includes dozens of photos of commonly found 20's vintage radios and parts. 160 pp, 0.6 lb 5.25" x 8.5"

Last Chance! Out of Print B-665 \$14.95**The Best Years of Australian Radio**

By Rod Smith

Hardcover, with dust jacket. A pictorial history of Australian radios from the 1920's to the 1950's. Over 300 black and white photos of down-under radios and speakers, with period advertisements and brief newspaper reports on industry trends. Over 140 manufacturers mentioned and indexed, including AWA, Kreisler, STC, Airzone, and Phillips. 190 pp. 2 lbs 8.5" x 12"

While Supplies Last B-842 \$24.95**Buying a Used Shortwave Receiver**

Buying a Used Shortwave Receiver can provide great savings. This book the information you need to intelligently select the right shortwave receiver at the right price. There is information on the 100 most commonly traded shortwave receivers, including both portable and tabletop models. Coverage, Specs, Features, New Price, Used Price, Photographs. 0.5 lb 5.5" x 8.5"

B-826

\$5.95**The Collector's Guide to Antique Radios 5th Edition Identification and Values**

By John Slusser & the staff of Radio Daze

This is the first edition of this book written by new authors. In the tradition set by Martin and Sue Bunis, this book contains all the most vital information on antique radios, plus an expanded description of each. Contains more than 600 color photographs, with a completely new section on E.H. Scott radios.

New!

B-882

\$19.95**Collector's Guide to Novelty Radios**

By Marty Bunis and Robert Breed

Lists over 600 models of transistor radios depicting media stars, advertising products, cartoon characters, automobiles, food and beverages and just about anything else imaginable. Each model is pictured in color and has a description and current market value. 224 pp, 1.6 lbs 8.5" x 11"

While Supplies Last B-671**\$18.95****Collector's Guide to Novelty Radios, Book II**

By Marty Bunis and Robert F. Breed

This book is a continuation of 1st book of Novelty radio collecting. As before a suggested price range is shown for each radio. As with all price guides, values shown are intended only as guides to help price a radio. Advertising and Product-Shaped Radios listed include: Isis, Auto-motive related, Food related, Lunch Boxes and Vending Machines. 199 pp, 2 lbs 8.5" x 11"

While Supplies Last**B-794****\$19.95****Communications Receivers, The Vacuum Tube ERA: 4th Ed.**

By Raymond S. Moore

Improved from edition 3 with new typesetting, new and improved pictures, extensive revisions and new information with 19 pages added. 144 pp. 1.2 lbs 8.5" x 11"

B-771**\$19.95****The Complete Guide To Antique Radios: Pre-War Consoles**

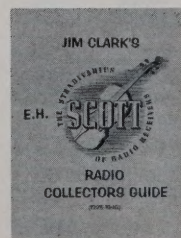
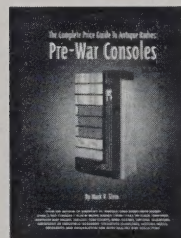
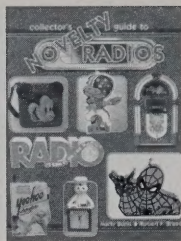
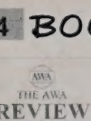
By Mark V. Stein

This is the first and only comprehensive reference on console radios. From Admiral to Zenith, over 3,500 models are individually pictured, described and valued. Consoles listed begin with the 1929/30 production year and span through the end of production in 1942. As with the Machine Age to Jet Age series, the author has included tube and band count information and variations wherever possible. This invaluable reference also includes an expanded resource section listing dealers, collectors, publications, experts/specialists, products/suppliers, restoration services and important websites. The author also provides important information about identification, grading/valuation and historic insights. Softbound laminate cover, B&W format 240 pp, 1.6 lbs 8.5" x 11"

B-852**\$29.95****E.H. Scott Radio Collector's Guide**

By Jim Clark

A guide to the "Stradivarius of Radio Receivers" from 1925 to 1946. Split into 5 different eras plus additional sections on E.H. Scott cabinets and accessories. Over 100 pages with many black and white pictures. Spiral bound. 0.8 lb 8.5" x 11"

B-694**\$29.95**



Evolution of the Radio

Edited by Scott Wood

Essentially a picture book, this contains 100 pages of re-produced magazine ads and sales brochures from the 1920's to 1950's, as well as over 100 pages of photographs of old radios reproduced in full-color. Over 1000 radios are pictured altogether. A newly revised 1994 price guide is included giving market values. 216 pp, 1.1 lb 8.5" x 11"

B-609

\$22.95



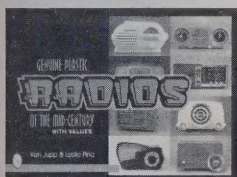
Evolution of the Radio, Vol. 2

Edited by Scott Wood

Contains over 600 full-color pictures of collectable radios dating from 1924 to 1959, with collector prices. 226 pp, 1.2 lbs 8.5" x 11"

B-643

\$24.95



Genuine Plastic Radios of the Mid-century, with Values

By Ken Jupp & Leslie Pina

Mid-century table radios made primarily of brightly colored plastic represent a newcomer to the radio collecting world. With more than 450 full color photographs of radios plus advertise-

ments and black and white vintage photos, this book is a must for anyone interested in radios, mid-century industrial design or popular culture.

Hardcover 219 pp, 3.5 lbs 11.25" x 8.75"

While Supplies Last

B-802

\$39.95



Guide to Old Radios: Pointers, Pictures and Prices 2nd Ed.

By David and Betty Johnson

Contains more than 3,300 listings with updated prices; organized alphabetically by manufacturers; 350 photos and illustrations which document the evolution of both radio and broadcasting; and two additional chapters on the heyday of radio. 277 pp, 1.4 lbs 7" x 10"

B-715

\$19.95



Heathkit: A Guide to Amateur Radio Products

By Chuck Penson WATZZE

A complete guide to the 160 or so principal amateur radio products the Heath company produced from 1952 to 1991. B&W pictures of each product are included with pricing, production time period, and comments. Does not go into great technical detail. Includes a great 31 page history of the Heath company. 248 pp, 1.8 lbs 8.5" x 11"

While Supplies Last

B-700

\$24.95



Hints & Kinks 15th Edition

Edited by Larry Wolfgang, WR1B

Compiled by Joel Kleinman, N1BKE and Steve Ford, WB8IMY

QST readers value the monthly "Hints & Kinks" column for its wealth of practical and valuable suggestions contributed by ham tinkerers and experimenters. This 15th edition brings together every item in the Hints & Kinks column from January 1997 through December 1999. You will also find articles from QST's "New Ham Companion" and "The Doctor is IN" - with handy information for hams of all levels of experience. 272 pp, 2 lbs 8.5" x 11"

New! B-871

\$12.00



The Impoverished Radio Experimenter

Contains tricks, tips and secrets to help the builder of simple radios and electrical gear achieve high performance at minimal cost. Also: vacuum tube substitutions; inexpensive tube power supplies; grid leak detectors; regenerative receivers and more. 48 pp, 1 lb 5.5" x 8.5"

New! B-861

\$5.95



Machine Age to Jet Age Vol. 1

By Mark V. Stein

Volume I - 1933-1959. A comprehensive pictorial price guide to machine age style tabletop radios. 46 major manufacturers are covered, as well as 30 pages on miscellaneous manufacturers. More than 1600 radios pictured. 256 pp, 1.9 lbs 8.5" x 11"

B-690

\$24.95



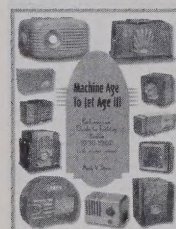
Machine Age to Jet Age Vol. 2

By Mark V. Stein

Volume II - 1930-1959, (with market values). A supplement to Mark Stein's first book (B-690), this volume has over 350 pages of all new listings, with 3,100 radios pictured and valued. Listings in both volumes now total over 4,000. 200 color photos. This volume is also expanded to include the years 1930 - 1932. A must for the tabletop radio collector. 358 pp, 2.3 lbs 8.5" x 11"

B-752

\$28.95



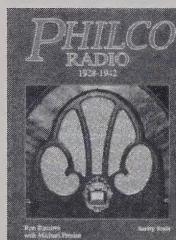
Machine Age to Jet Age Vol. 3

By Mark V. Stein

Volume III - 1930-1962. All new listings, with over 2,800 radios pictured and dated, with tube counts and current collector values. Listings for the 3 volumes of this excellent series now totals 7,000. 256 pp, 1.6 lb 8.5" x 11"

B-829

\$29.95



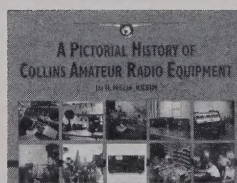
Philco Radio: 1928-1942

By Ron Ramirez with Michael Prosisie

A comprehensive reference book on Philco, the leading radio manufacturer during radio's "Golden Age". Contains a year-by-year look at the Philco radio line with specifications for each model. 200 color photographs, 200 b/w photographs and line drawings. 160 pp, 1.5 lbs 8.5" x 11"

B-644

\$29.95



A Pictorial History of Collins Radio Equipment

By Jay H. Miller

The most comprehensive story of Collins amateur radio equipment told in hundreds of original photographs and in the words of men who made it happen. Includes: Full biography of company founder Arthur A. Collins, Hundreds of photographs, many in color, Early gear, History of SSNB development, More Perfect Communications, On The Air with Collins Radio. 175 pp plus cover, 1.5 lbs 11" x 8.5"

While Supplies Last

B-837

\$39.95

fax: 480.820.4643 OR 800.706.6789 (us & canada only)



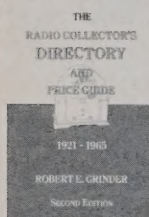
Radios by Hallicrafters- Revised and expanded 2nd Ed. with Price Guide

By Chuck Dachis

This new, complete book covers every known Hallicrafters model and accessory. A comprehensive history of the company is provided, repair methods are discussed, and all the units are pictured and listed in almost 700 photographs. Technical specifications are provided in detail for each one, along with dates of production, customer options, color and design variations, and accompanying power sources and tube types. This book is perfect for anyone interested in the history of radio use and technology, and is absolutely indispensable for Hallicrafter collectors. A current price guide is included, compiled by the past two decades' most avid Hallicrafters collector. 235 pp, 2.75 lbs 8.5" x 11"

B-832

\$29.95



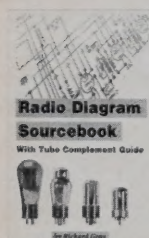
The Radio Collector's Directory & Price Guide 2nd Ed.

By Robert Grinder

A thorough revision of the first edition, this edition has been expanded from 8,500 to 20,000 models covered, with the range of years covered increased from 1921-1941 to 1921-1965. Trade names covered have more than doubled to over 1400. 524 pp, 1.4 lbs 5.5" x 8.5"

B-691

\$26.95



Radio Diagram Source Book With Tube Complement Guide

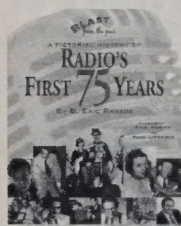
By Richard Gray

Need a wiring diagram to repair an old radio, or help identifying a make or model number? This book introduces the collector to various sources of early service literature. Lists over 10,000 U.S. made radios with tube complement, dial lamp and IF frequency used.

269 pp, 1.0 lb 6" x 9"

B-739

\$18.95



Radio's First 75 Years A Pictorial History

By B. Eric Rhoads

Get the story on who and what shaped the Radio industry. Almost 1,000 never-before-published photos of radio personalities from every era. This photo book covers Radio from its invention to the present day. This **hardcover** coffee-table book is a must for Radio lovers. It also includes a never-before-published "RadioFan" directory which gives names and addresses of clubs, museums, newsletters, and sources for old Radio shows, antique Radio collecting, and more! 463 pp, 3.6 lbs 8.75" x 11.25"

New Lower Price!

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Radio Manufacturers of the 1920's

By Alan Douglas

This monumental 3 volume work offers an outline history for each of the major radio manufacturers of the 1920's. It features the company principals and their factories, the financial ups and downs of the industry, and hundreds of pictures of radios produced up to 1930. Over 250 pages each volume. All softcover. 2.0 lbs each. 8.5" x 11" each.

Vol. 1 A-C Dayton through J.B. Ferguson

B-385 \$24.95

Vol. 2 Freed Elsemann through Preiss

B-534 29.95

Vol. 3 RCA through Zenith

B-567 29.95

Set of All Three

B-RADIO3

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The Saga of Marconi Osram Valve A History of Valve Making

By Barry Vyse & George Jessop

Electronics were born in 1904 with the invention of the thermionic diode. From then on up to c1960, thermionic valves were THE technology. Marconi-Osram Valve was involved in the valve business from the beginning. This was the earliest time GEC was associated with the name Marconi, and it became one of the world's great companies in its contribution to science, technology and

industry over an extended period. This book details the story of this great company with full illustrations, both black and white and color.

346 pp. 2.4 lbs Softcover 6.5" x 9.5"

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Sears Silvertone Catalogs 1930-1942

By Mark V. Stein

The Complete Price Guide to Antique Radios. This is the first publication ever to focus on radios marketed under the Sears Silvertone brand name. Over 1000 Silvertone Radios as they originally appeared in the Sears Catalogs - Historical notes, current values, variations and manufacturer's code key also included. 240 pp, 1.25 lbs 8.5" x 11"

New! B-876

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Shortwave Receivers Past and Present Communication Receivers 1942-1997, 3rd Ed.

By Fred Osterman

Your comprehensive guide to over 770 short-wave receivers manufactured in the last 55 years. Tabletop, general coverage, amateur, short-wave and specialty receivers are covered. Whether you are a short-wave listener, amateur radio operator or radio collector, here is the information you need in an easy to use format.

One hundred short-wave receiver manufacturers from the period of 1942 to 1997 are represented. 473 pp, 4.0 lbs 8.5" x 11"

B-782

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This Was Radio

Introduction by Leonard Maltin

By Ronald Lackmann

Here is the story of Radio: in words, photographs and on two compact discs... how it all began and the people who brought it to life. The famous voices, the inventors, the network founders, the

shows, the events and the faces. 70 pp. + 2 Audio CD's 2.5 lbs 14.25" x 11.25"

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Transmitters

Exciters & Power Amplifiers, 1930-1980

By Raymond S. Moore

A concise guide to American made HAM radio transmitters and amplifiers of the tube era. Covers kits and commercial transmitters with their original price and list of accessories. Included is a 5 page history of the development of amateur transmitters from original power oscillator types through the later

filter SSB exciters and transmitters. 144 pp, 1.1 lbs 8.25" x 11"

B-725

\$21.95

Transistor Radios 1954-1968

By Norman Smith

Get the story on who and what shaped the Radio Get ready for a nostalgic trip back to the heyday of portable music. Over 1,000 radios are featured in this book, from American manufacturers such as Admiral and Zenith and from Japanese manufacturers such as Hitachi, Realtone and Sony. All radios are identified by manufacturer, model number, number of transistors, special features, country of origin and date. A complete value guide is included to help the collectors. 160 pp, 2 lbs 8.5" x 11"

B-801

\$29.95

Voices in the Air: The Fascination of Radio

By Robert Bonebrake

Anything interesting can turn into a hobby, but in addition to being interested, you must also be fascinated in order for it to become a lasting hobby. Then follows the knowledge of the subject and the satisfaction that comes with it. This journey from interest to knowledge to fascination to satisfaction is chronicled in this book. Has many illustrations, with examples and photographs, of many home-built radio projects. It begins with crystal sets in 1938 and continues to the present time. 174 pp, 1 lb 8.5" x 11"

B-810

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Zenith Radio: The Early Years 1919-1935

By Harold Cones, Ph.D

John Bryant, AIA with Martin Blankinship and William Wade. Zenith's "The Quality Goes in Before the Name Goes On" is one of the most recognized, and well earned corporate mottos in America. With access to the Zenith corporate archives and their discovery of the long sealed files of one of Zenith's founders, the authors present for the first time the documented story of the early years of Zenith. The authors present a wealth of never before published photographs, documents and information as well as color portraits of many Zenith radios of the era. Includes a database of valuable information which covers every radio produced by the company, along with a rarity and price guide. 192 pp, 2 lbs 11" x 8.5"

B-770

\$29.95

Zenith Radio Service Manual and Parts List

Re-print of early Zenith service manual. Includes schematics and parts lists for Zenith radios made from 1928 through 1939. Offers help with alignment procedures, antenna alignment, and gives parts lists along with tube layouts on most models. 510 pp, 2.6 lbs 8.5" x 11"

New Lower Price!

B-755

\$19.95

The Zenith Trans-Oceanic

By John H. Bryant, AIA and Harold N. Cones, Ph.D.

The royalty of Radios. The definitive book of perhaps the most popular radio produced during the first 50 years of radio. Complete history as well as collecting and restoration hints. Full of pictures, many in color. 160 pp, 1.7 lbs 8.5" x 11"

B-689

\$24.95

Antique Phonographs

Columbia Phonograph Companion, Volume II

By Robert W. Baumbach

This book details the efforts and the accomplishments of the American Graphophone Company and it's successors in the production and marketing of the talking machines marked under the Columbia banner, and variously referred to as Graphophones, Grafonolas or Phonographs. Covers all of the disc playing machines from the first in 1899 through the large and expensive machines of the great heyday of the windup phonograph to the beginning of the great depression. This book is intended to be a guide for collectors of any Columbia disc machine. It provides company history and interesting facts relating to the development of the company, its products and the industry as a whole. Hardcover 257 pp, 1.5 lbs 6" x 9.5"

B-743

\$29.95

The Compleat Talking Machine, 3rd Ed.

By Eric L. Reiss

Volume 3 of this best selling series of books expands with new chapters of how to identify fake machines and how to make home recordings on cylinders. Includes a glossary of phonograph terminology, biographical sketches of twenty individuals who were instrumental in the early development of the phonograph and company histories on Edison, Columbia, Victor and Zon-O Phone. Features an expanded identification guide with photos and descriptions of over 250 wind-up phonographs, and an updated price guide for over 350 outside-horn machines. 249 pp, 2 lbs 8.5" x 11"

B-800

\$29.95

Discovering Antique Phonographs 1877-1929

By Timothy C. Fabrizio & George F. Paul

Through over 400 beautiful color illustrations, follow the progress of the acoustic talking machine from its crude beginnings in the 1870s to its most splendid and sophisticated heights in the early 20th century. An unparalleled archive of rare, fascinating, and previously undocumented objects has been assembled accompanied by the story behind the beautiful, bright machinery. A value guide will further enlighten the collector on the modern marketplace. 240 pp, 3.2 lbs Hardcover 8.75" x 11.25"

New! B-877

\$49.95

The Edison Cylinder Phonograph Companion

By George Frow

From the Naughty Nineties to the Roaring Twenties, The Edison Cylinder Phonograph caught most of the tunes and characters of the day. This book traces many models and follows them from production committee, early outlines and into manufacture. Includes illustrations and descriptions of each model from 1877 to 1929. Hardcover. 384 pp, 2.0 lbs 6.5" x 9.5"

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The Edison Disc Phonographs and the Diamond Discs

By George Frow

296 pages describing all models, giving production figures, promotional schemes and extensively describing production processes for making discs. The most complete history of Edison disc phonographs ever published. Hardcover, excellent quality. 2.0 lbs 6.5" x 9.5"

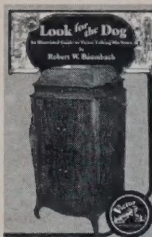
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**Look for the Dog**

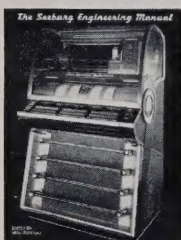
By Robert W. Baumbach

An illustrated Guide to Victor Talking Machines, 1901 to 1929. 326 pages cover every model of phonograph Victor produced, with illustrations and descriptions. Also contains a section on servicing notes. This is the most complete book on Victor phonographs available anywhere! 326 pp, 1.1 lbs 5.5" x 8.5"

B-646**\$19.95****Phonographs With Flair**

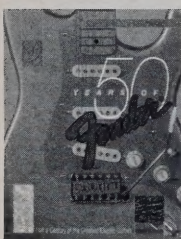
By Timothy C. Fabrizio & George F. Paul

The history of phonograph design is not just about eye-catching cabinetry, it is the saga of our parents and grandparents, and the way they saw the world in which they lived. Through the **340 color illustrations** and detailed captions that the authors have assembled, the development of phonograph design is engagingly explored from the early 1900s through the disco days of the 1970s. Whether you are interested in phonograph collecting, design, art, music or twentieth century social history, you will be fascinated by *Phonographs With Flair*. 192 pp, 2.9 lbs **Hardcover** 11.25" x 8.75"

While Supplies Last**New! B-878****\$49.95****The Seeburg Engineering Manual**

Edited by Mike Zuccaro

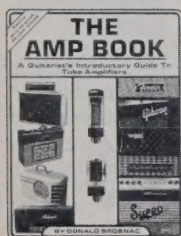
A compilation of Seeburg service information on the "Select-O-Matic" mechanism, featuring interviews with George Boesen, designer of the Tormat Selector, and Ed Meixner, Seeburg engineer. 48 pp, 0.5 lb 8.5" x 11"

While Supplies Last B-668**\$14.95****Guitar****50 Years of Fender**

By Tony Bacon

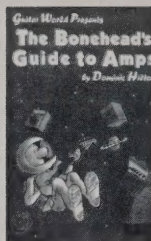
Fender is the most successful modern maker of electric guitars, and this year marks the 50th anniversary of its first instrument. This new book tells the complete year-by-year story of Fender's development from 1950 to 2000 accompanied by stunning photographs of players, instruments and memorabilia.

50 Years of Fender is a beautiful, detailed examination of five decades of great guitars and the fine music they

inspire. 128 pp, 1.5 lbs Full Color 8.5" x 11"**New! B-870****\$19.95****The Amp Book: A Guitarists Introductory Guide to Tube Amplifiers**

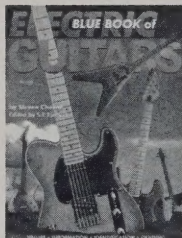
By Donald Brosnac

Covers what an amp is, how an amp works and what to look for in an amp. Includes history of tube amps from 1932 to the present with de-tailed information on the evolution of amps both internally and externally. Fender, Gibson, Gretsch, Vox, Ampeg as well as others are covered. 64 pp, 0.6 lb 8.5" x 11"

B-688**\$11.95****The Bonehead's Guide to Amps**

By Dominic Hilton

Presented by Guitar World Magazine. The ultimate book for everyone who wants a quick and easy to understand guide to amplifiers. You'll find out about: The history of amps, construction and how amps work; different types of amps, the sounds they make and how to use them; which amp is right for you; new vs. used amps and what to look for when buying an amp; tips and recommendations on how to get the most out of your amp. 78 pp, 0.5 lb 6" x 9"

B-854**\$9.95****Blue Book of Electric Guitars**

By Steven Cherna

This 5th edition contains over 40,000 prices, including hundreds of photos and graphics to help identify most new and vintage electric guitars. Also has a lot of technical information and data, including serialization, to help both the novice and seasoned dealer/collector figure the most up-to-date electric guitar pricing and related information. 792 pp, 4.5 lbs 8.5" x 11"

New Lower Price!**B-812****\$19.95****Complete Guide to Guitar and Amp Maintenance- A Practical Manual for Every Guitar Player**

By Ritchie Flieger

From the author of "AMPS!" comes an essential survival guide for every guitar player and amp owner. Packed with concise, clearly written tips on troubleshooting and repairs, with straightforward, step-by-step instructions using readily available tools. Contains over 150 photos. 80 pp, 0.6 lb 9" x 12"

B-701**\$14.95****Dave Funk's Tube Amp Workbook****Complete Guide to Vintage Tube Amplifiers Vol. 1**

By Dave Funk

A large, easy to read tube amp book, designed to be an invaluable reference to those working on or building their own tube amps. Learn how to

approach a service job, the tools you'll need on your workbench, and how to use them. Loaded with cross-reference material, lookup tables, formulas and the information you'll need to know when your amp is working properly. 421 pp, 2.5 lbs 11" x 8.25"

B-732**\$38.95****A Desktop Reference of Hip Vintage Guitar Amps**

By Gerald Weber, owner of Kendrick Amplifiers

He answers questions about vintage guitar amplifiers on topics such as biasing for output tubes and easy modifications. He includes an analysis of Fender classics such as the Tweed Champ, Tweed Deluxe, Deluxe Reverb, Super Reverb and others. Also included are schematics for Ampeg, Fender, Gibson, Hiwatt, Magnatone, Marshall, Rickenbacker, Silvertone and Vox amps. 500 pp, 1.5 lbs 6" x 9"

B-663**\$29.95**

The Fender Bass

By Klaus Blasquiz

The Fender Bass, invented over 40 years ago by the creative genius of Leo Fender still remains the most sought after electric bass. Before the invention of the Fender, there was no electric bass at all! Leo's design was so definitive that it soon became a classic, an essential element in creating the sound of modern music. Every new bass that comes on the market is more or less modeled on Leo's design. *Fender Bass* tells the detailed story of the development of the Electric Bass by describing the different models and their improvements from the original instrument up through its present form. 0.5 lbs 9" x 12"

New! B-874

\$9.95

Gibson Electrics

By A.R. Duchossoir

The first book to present a complete and illustrated history of all guitars ever produced by one of the world's most prestigious musical instrument manufacturers. All info is based on Gibson's own literature and documents. Chapters include the different stages of evolution of the electric guitar, information on serial numbers, and players who helped build the Gibson Electrics reputation. Over 200 illustrations, 32 color pages, 2 lbs 9" x 12"

New Lower Price!
While Supplies Last

B-816

\$19.95

Great Tube Amp and Guitar Mods

By Mike Thompson

Over 50 useful modifications for Fender and Marshall amps and the guitar. The author lets reader in on some neat little tricks that can be done to their equipment. All modifications are simple and can be done with easy to find parts. Also includes speaker cabinet and equipment tips for the musician who wishes to customize. 150 pp, 1.1 lbs 8.5" x 11"

B-737

\$12.95

Guitar Player Repair Guide

How to Set Up, Maintain, and Repair Electrics and Acoustics

By Dan Erlewine

This revised edition is a step-by-step manual to maintaining and repairing electric or acoustic guitars and basses. Players will master the basic maintenance and set up of a guitar. An advanced crafts-person will discover this to be a valuable reference source for complex procedures such as replacing nuts and frets. This second

edition incorporates new techniques and tools, plus detailed repair information for specific models. 309 pp, 2.0 lbs 8.5" x 11"

While Supplies Last

B-784

\$22.95

The Hammond Organ Beauty in the B
The Story of the B-3 and Other Great Hammond Organs, Plus the Leslie Speaker, and much more
By Mark Vail

This book celebrates the history and influence of the Hammond B-3 and its right-hand man, Leslie Speaker. It explains the tone-wheel system that renders the famous Hammond sound, and reveals secrets behind the B-3's drawbars, presets, pedalboard, percussion, and other unique features. Also features "25 licks you must know," plus tips from the masters of the B-3. 239 pp, 1.5 lbs 8.25" x 10.75"

B-788

\$24.95



The High Performance Marshall Handbook

A Guide to Great Marshall Amplifier Sounds

By John Boehnlein

Includes chapters on standard amplifiers from 1962 to 1990, retubing for maximum performance, how to over-drive master volume and much more.

55 pp, 0.5 lbs 8.5" x 11"

New Lower Price!

B-696

\$14.95



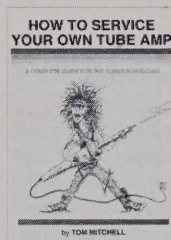
The History of Marshall

By Michael Doyle

The definitive account of the guitar manufacturer known as the "sound of rock." Includes complete listings of every product Marshall ever made, over 100 schematics, the history of the Celestion speaker and early catalog reprints. Hundreds of photographs, including 64 color plates. 254 pages, 2.1 lbs 9" x 12"

B-661

\$32.95



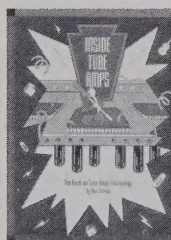
How to Service Your Own Tube Amp

By Tom Mitchell

A well organized and easy-to-understand approach to guitar amplifier repair covering basic electronics, reading schematics, understanding tubes and transformers, tube biasing and use of test equipment. Also provides 10 troubleshooting flowcharts, voltage charts for typical amplifiers, and many modifications that you can do yourself. Same as B-V578 but without video cassette. 250 pp, 2.3 lbs 8.5" x 11"

B-707

\$29.95



Inside Tube Amps The Book on Tube Amps

By Dan Torres

This book is written for musicians, not technicians. This book will help you get your personal sonic signature, and give you the knowledge to change it when your tastes change. Some approaches are new and experimental, some are very old. Looks at "standard practices" as well as tricks and techniques outside of the "perfect specs". 310 pp, 1.9 lbs 8.5" x 11"

B-733

\$34.95



Projects for Guitarists

How to Set Up, Maintain, and Repair Electrics and Acoustics

This is a collection of 35 useful, inexpensive educational projects designed by Guitar Player magazine consulting editor Craig Anderton. Whether you're looking for a great sounding tube pre-amp, a de-hisser for your vintage effects, cool guitar rewirings, a fatter sound, a cord tester that catches intermittent problems, some adapters to interface with studio gear, or any of several other problem - solving or sound improving devices, this book has the answers. It also includes chapters on how to read schematics, and construction tips.

171 pp, 1 lb 8.5" x 11"

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B-787

\$19.95

fax: 480.820.4643 OR 800.706.6789 (us & canada only)

**Stompbox**

A History of Guitar Fuzzes, Flangers, Phaser, Echos, & Wahs

By Art Thompson

Musicians, engineers and entrepreneurs give behind-the-scenes tales of the events that led to the new guitar effects of the '60s, '70s and '80s. With their odd shapes, wild colors, and strange names, stompboxes and their stories finally get their credit. Over 200 photos.

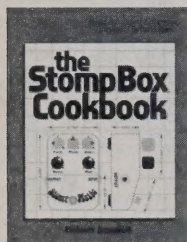
159 pp, 1.0 lb 7" x 11"

New Lower Price!

While Supplies Last

B-786

\$21.95

**The Stompbox Cookbook**

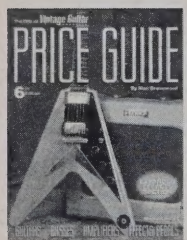
By Nick Boscovelli

This book shows you how to build 38 advanced effects for electric guitar & bass, including soft-knee compressor with auto-variable attack & decay, stereo vibrato, spring reverb, quad paramedic EQ, super sustainer, 'designer' tremolos, & custom fuzz, plus a wealth of ingredients to cook up new stomp boxes. Contains over 600 hundred photos & schematics. **Softcover**

259 pp, 1.75 lbs 8.5" x 11"

B-834

\$29.95

**The Official Vintage Guitar® Price Guide**

By Alan Greenwood

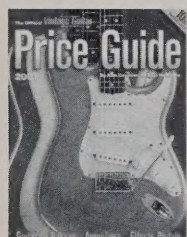
From *Vintage Guitar*, America's largest and most recognized magazine on classic vintage guitar and amps. This authoritative and up-to-date guide offers thousands of market values on hundreds of brands and models of guitars, amps, basses, effects pedals and more. Fully indexed, easy to use and understand, and now complete with hard to find historical information on most brands. 207 pp, 1.3 lbs 8.25" x 10.75"

New Lower Price!

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B-762

\$14.95

**Vintage Guitar Price Guide 2001**

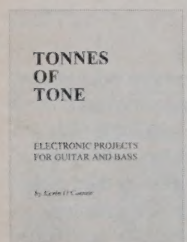
By Alan Greenwood & Gil Hembree

10th Anniversary Edition of the VG Price Guide Book. Over 90% of the prices have changed since the last edition. It offers introductory remarks on the brands and models along with historical information on vintage guitars in a fully indexed format. Includes basses, amplifiers and effects pedals. 300pp, 2.5 lbs 8.25" x 10.75"

While Supplies Last

New! B-865

\$19.95

**Tonnes of Tone**

By Kevin O'Connor

A collection of projects for electric guitar and bass players. Save money by building your own acoustic preamp; build a two-channel tube preamp for guitar, and more. Construct a 15W tube power amp or a true class-A solid state amp. The "experimenters power supply" is excellent for tinkering with tube circuits, containing separate AC heater, DC heater plate and bias supplies. Build a wide range tremolo circuit and an all-tube reverb unit.

Circuit operation, construction, & layout guidelines are provided. Every project uses easy to find parts. 105 pp, 1.0 lb 8.25" x 11"

B-749

\$25.00

**The Tube Amp Book, 4th Ed.**

By Aspen Pittman

Newly revised and expanded, the 4th Edition contains company histories of guitar amp manufacturers. 460 pages of schematics for popular amps, tube data on commonly used audio tubes and 50 pages of "Vintage Fantasy" color pictures of collectible guitars and amps. 765 pp, 2.1 lbs 5.75" x 8.25"

B-581

\$29.95

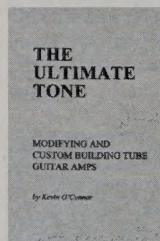
**Tube Amp Talk for the Guitarist and Tech**

By Gerald Weber

A compilation of articles written for *Vintage Guitar* magazine from 1993 to 1996. Includes sections with articles on servicing your guitar amp, modifications, and also includes a "Trainwreck" section full of articles written by Ken Fischer for *Vintage Guitar*. Foreword is written by Billy F. Gibbons. 537 pp, 2 lbs 6" x 9"

B-773

\$29.95

**The Ultimate Tone Vol. 1**

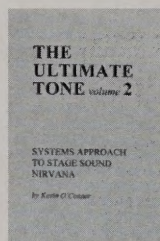
Modifying and Custom Building Tube Guitar Amps

By Kevin O'Connor

Offers the technician or hobbyist information for properly implementing guitar amplifier modifications. Topics include stage setups, amplifier brand surveys, vacuum tube and power supply operation, preamp circuits and master volume, tube type comparison, and effect loops. Includes an extensive discussion of switching methods. Includes data for 17 common tube types and for two Hammond Mfg. transformer model lines. Spiral bound, 395 figures. 368 pp, 2.5 lbs 8.5" x 11"

B-695

\$55.00

**The Ultimate Tone Vol. 2**

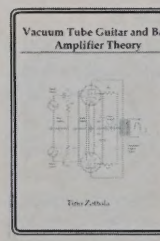
Modifying and Custom Building Tube Guitar Amps

By Kevin O'Connor

The achievement of great, live sound is the premise used to explore modern high-gain guitar pre-amps; proper treatment of acoustic instruments; tube vocal PA's; dynamic bass gear; all types of tube, semi, hybrid and alternative power amplifier design; power supply mods that are "toneful"; simple switching methods; speaker cabinet design; getting the most from effects loops and chains; and, modular stage monitoring systems that work! Circuits are explained so the tinkerer can build or modify guitar equipment with confidence and success. Spiral bound. 200 figures. 250 pp, 1.9 lbs 8.5" x 11"

B-772

\$46.00

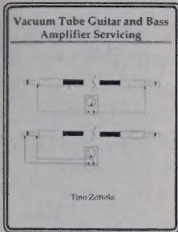
**Vacuum Tube Guitar and Bass Amplifier Theory**

By Tino Zottola

Describes the history and operation of vacuum tubes as well as how they are used in guitar/bass amplifier circuits. Amplifier electrical and physical layout is then examined. The factors affecting amplifier sound are also described. Included in the appendices is useful data such as: resistor and capacitor codes, vacuum tube electrical data, wire gauge table, and musical scale frequency chart. 59 pp, 0.6 lb 8.5" x 11"

B-735

\$14.95



Vacuum Tube Guitar and Bass Amplifier Servicing
By Tino Zottola

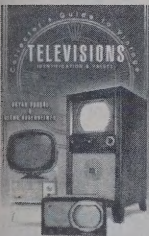
Guitar amp repair is split into several categories: User serviceable problems (fixable without chassis removal), dead and strange sounding amps. Includes sections on amp disassembly, preventative maintenance, special effects repair, signal tracing, component testing and replacement, bias adjustment, tube matching and amp mods. It's assumed the reader knows basic

electronic theory, reading schematics, and can use tools and test equipment. 84 pp, 0.8 lb 8.5" x 11"

B-736

\$14.95

Early Television



Collector's Guide to Vintage Televisions

By Bryan Durbal & Glenn Bubenheimer

Current values for over 1400 postwar TV's, including 1940's consoles and tabletops, 1950's predictas and portables. 1960's JVC, Sony and Panasonic, through the hand held sets of the 1980's. Over 200 full color photos. 1 lb 5.25" x 8.5"

B-833

\$15.95



TUBE The Invention of Television

By David E. Fisher and Marshall Jon Fisher

Who invented television? How did the invention come to be? Fifty years after television's commercial debut, TUBE answers these questions and more. An anecdotal history that reads like an adventure story, TUBE follows the competing and criss-crossing lives of television's primary inventors: John Logie Baird, Philo T. Farnsworth, Vladimir Zworykin and David Sarnoff. **Hardcover**, 427

pp, (plus 16 pages of black & white pictures), 1.9 lbs 6.25" x 9.25"

Blowout Pricing!

B-760

\$9.95

While Supplies Last

Crystal Sets

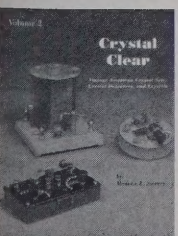


Crystal Clear Vol. 1 Vintage American Crystal Sets, Crystal Detectors and Crystals
By Maurice L. Sievers

A comprehensive guide to crystal sets, detectors and crystals produced in the United States from 1920 to 1955. Lists over 500 crystal sets and 330 detectors made by over 400 different companies. Includes over 400 photos of early sets, plus hundreds of advertisements. 282 pp, 2.2 lbs 8.5" x 11"

B-568

\$29.95



Crystal Clear, Vol. 2 Vintage American Crystal Sets, Crystal Detectors and Crystals
By Maurice L. Sievers

A companion to Volume 1. Includes many ads, illustrations and details which would not fit in Volume 1. In addition to many entirely new listings, missing details and a few corrections to listings in Volume 1 are included. 244 pp, 1.9 lbs 8.5" x 11"

New Lower Price!

B-698

\$24.95



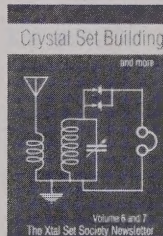
Crystal Receiving Sets

and How to Make Them
Edited by Bernard E. Jones

Deals with the making of a number of crystal sets representative of those in present-day. Compiled from the pages of "Amateur Wireless," the well known weekly journal for wireless amateurs. 133 pp, 1 lb 5.5" x 8.5"

New! B-860

\$10.95



Crystal Set Building and More

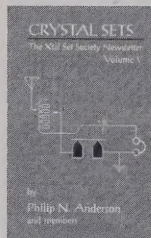
The Xtal Set Society Newsletter, Vols. 6 & 7

Edited by Rebecca Hewes

Crystal Set Radios? Yes, that's right. Over ninety years since their invention, Xtal sets are still capturing people's attention. Every other month, the Xtal Set Society publishes a newsletter with projects and articles from members. This compilation contains all issues from January 1996 through November 1997. Focus is on simple old - time, elegant radio circuits you can build from scratch, with some circuits and one tubers. 168 pp, 0.5lb 6" x 9"

B-797

\$15.95



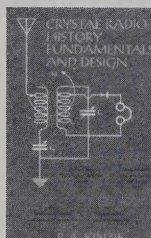
Crystal Sets The Xtal Set Society Newsletter

By Philip N. Anderson & Members

The Xtal Set Society, started in 1991, is dedicated to once again building and experimenting with radio electronics, through the use of the crystal set. This volume contains articles from 6 of the society's newsletters from 1995. Articles include design of unpowered AM receivers using rocks, radio outfit in a headset, Marconi 107-A tuner and more. 88 pp, 0.3 lb 5.5" x 8.5"

B-717

\$11.95



Crystal Radio History, Fundamentals and Design

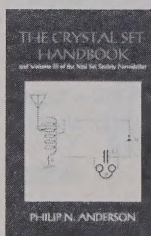
By P.A. Kinzie

Published by the Xtal Set Society, this book chronicles the fascinating history and development of the crystal detector, including the reasons for its brief dominance of the radio market after the turn of the century. Starting with the discovery of solid-state rectification and then through the development of the crystal detector the reader learns about great inventors such as Pickard, Braun, Dunwoody and others. Radio fundamentals such as antennas, ground, lightning protection, tuned circuits, and detection are covered for the beginner. The unending compromise between selectivity and sensitivity is discussed for the crystal set designer. Advanced topics such as the use of multi-tuned circuits and wave traps follow for the more experienced exper-

imenter. 119 pp, 0.3 lb 5.25" x 8.5"

B-729

\$12.95



The Crystal Set Handbook

By Philip N. Anderson

A practical "how-to" book of crystal radio construction. Contains a simple oat box project, formulas for coil inductance and coil Q, a procedure for measuring coil capacitance and theory for L-C circuit matching. 130 pp, 0.5 lb 5.25" x 8.25"

B-673

\$11.95

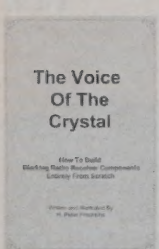
fax: 480.820.4643 OR 800.706.6789 (us & canada only)

**Crystal Set Projects:****15 Radio Projects You Can Build***Edited By The Xtal Set Society*

A collection of 15 radio projects designed by members of the Xtal Set Society. Includes high tech and low tech, vintage and modern, loop antennas and short-wave bands. Great weekend or evening projects. Step back to the roots of radio. 160 pp, 0.5 lb 6" x 9"

B-757**\$14.95****Crystal Set Loopers, A 3 Tuber & More, Vol. 8***Edited By The Xtal Set Society*

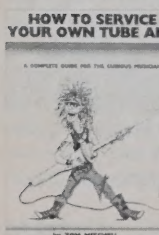
The biggest and best volume yet of the Society Newsletter. Has complete directions for building 5 crystal radios, a 3 tube radio and a homebrew variocoupler. Learn about biasing effects on diode performance and crystal detector experiments. Discover crystal set secrets by reading letters from members all over the world. This book continues to focus on simple, old-time, elegant radio circuits. Includes projects you can build, schematics, radio secrets and theory articles. Build a Short-wave looper, Antenna Tuner/AM trap, a Crystal Set from a deodorant stick and more. 128 pp, 1 lb 6" x 9"

B-819**\$15.95****The Voice of the Crystal***By H. Peter Friedrichs*

How to build working radio receiver components entirely from scratch. Contains basic theory of crystal radio operation including description of simple headphones, characteristics of a good detector, capacitor characteristics, coil designs, simple tuners and antennas. 183 pp, 0.5 lb 5.5" x 8.5"

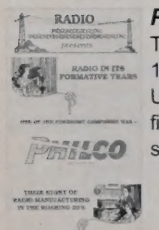
B-851**\$14.95****videos****Around the Dial Vintage Radios**

For those interested in the history, collecting and restoring of classic and antique radios. Volume 1 covers Admiral through Grunow. Volume 2 covers Halton through Zenith. Over 90 manufacturers represented. Each video approximately 1 hour. VHS cassette, 1 lb

Vol. 1 B-V558**\$29.95****Vol. 2 B-V559****29.95****How to Service Your Own Tube Amp***By Tom Mitchell*

A well-organized and easy-to-understand approach to guitar amplifier repair covering basic electronics, reading schematics, understanding tubes and transformers, tube biasing and use of test equipment. Also provides 10 troubleshooting flowcharts, voltage charts for typical amplifiers, and many modifications that you can do yourself. 250 page manual with accompanying VHS

video cassette. 2.5 lbs

B-V578**\$69.95****Philco**

The story of how Philco began making radios in the late 1920s and became the largest radio manufacturer in the U.S. through the 1930s. Includes a tour of the Philco factory filmed in 1929, showing how a radio goes through production, step-by-step. 28 minutes, VHS cassette. 1.0 lb

B-V613**\$19.95****Radio Collector**

"Radio Collector" originally aired on PBS television as a 5-part series and was nominated for an Emmy for best informational series. The 130 minute program covers radio history, collecting and restoration techniques. It includes pictures of many collectible radios, as well as interviews with several well-known California collectors. 130 minutes, VHS cassette. 1.0 lb

B-V556**\$31.95****Restoring Pocket Radios***By Eric Wrobbel & Ron Mansfield*

This tape will help you restore your transistor radios, enhance their appearance, increase their value, and maybe get them playing again! This video contains over 60 minutes of money-saving insiders' tips and techniques that are guaranteed to help you improve your collection. Digitally recorded and edited, this tape is a must of your collection. 1 lb

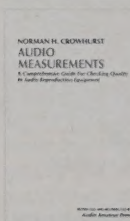
New! B-V680**\$24.95****Audio****An Approach to Audio Frequency Amplifier Design**

First published in 1957 by the Valves and Electronics Department of General Electric Company of England, this book covers the essential details and circuit diagrams of a wide range of audio frequency amplifiers from a 5 watt ultra-linear to an 1100 watt Class AB2 amplifier. All designs are based on vacuum tubes. Full parts list accompanies each schematic.

126 pages, 0.6 lb 6" x 9"

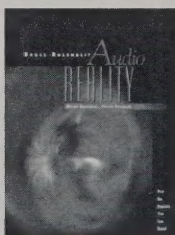
B-679**\$19.95****The Art of the Amplifier***By Michael Doyle*

Pays tribute to the history and beauty of generations of amplifiers with nearly 200 stunning full color photos. Coverage of Ampeg, Fender, Marshall, Mesa Boogie, Orange, Selmer, Soldano, Vox and others. 80 pp, 0.8 lb 9" x 12"

B-855**\$22.95****Audio Measurements***By Norman H. Crowhurst*

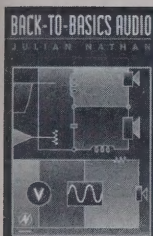
This book begins with measurement techniques and follows with a full discussion of all manner of test equipment. Although it deals with the equipment of the day, most based on vacuum tubes, much of that equipment is still available. Fully indexed, the book is a comprehensive and informative volume on determining the quality and performance level of almost any piece of audio equipment.

223 pages, 1 lb 5.25" x 8.25"

B-814**\$12.95****Audio Reality***By Bruce Rozenblit*

There are 6 projects in this book that you can build. Contains complete schematics, parts lists and circuit explanations. All design techniques are revealed. In addition the author shares tips and procedures for working with sheet metal and wiring. Projects include: the patented Transcendent OTL in both 25 and 80 watt version, the grounded grid preamp, the super compact 150 watt amp, the cathode follower single-ended amp, and a new phono preamp design. This book has sections on conductors, connectors, speaker cables, damping systems, feedback, vacuum tubes and more. 128 pp, 1 lb 8.5" x 11"

B-818**\$29.95**



Back-To-Basics Audio

Julian Nathan

A thorough yet approachable handbook on audio theory, practice, and allied electrical systems. Electrical principles are first discussed in easy to understand terms as a basis for understanding audio components and equipment, covered in hands-on style in the rest of the book. Elements of home theater audio and projection are also addressed in practical terms. 344 pp, 1.5 lbs 6" x 9.25"

Blowout Price!
While Supplies Last

B-806 \$24.95



Beginner's Guide to Audio Design

By Bruce Rozenblit

Are you interested in tube audio but don't know where to start, or are you already using tubes but don't know what's going on in the circuit? Rozenblit describes with simple clear explanations what a tube is, how it works, how to read characteristic curves and understand specifications. He then discusses one stage amplifiers, gain circuits, negative feedback, power supplies as well as a tour of amplifier parts of all types. 132 pages, 1.0 lb 8.5" x 11"

B-761 \$24.95



The Brute: A Super Amplifier for the Do-It-Yourself Perfectionist

By Edward T. Dell

Reprinted by Audio Amateur Corp. from a 1966 Stereophile article. Describes the construction of a tube type amplifier which is the deluxe version of a Dynaco Stereo 70. This is the ultimate project either for learning or improving construction skills, and acquiring a knowledge of amplifiers through hands-on experience. The amplifier itself is supported by a massive power supply, equipped with metering capabilities for all voltages, and constructed with quality components. The result is a powerful high-end amplifier at a reasonable cost. NOTE! Some parts may be difficult to find. 11pp, 1 lb 8.5" x 11"

B-789 \$7.95



Build Your Own Audio Valve Amplifier

By Rainer zur Linde

Whether it is nostalgia, interest in technical parameters, the appeal of a gleaming amplifier chassis with softly glowing valves, or the firm conviction that the sound of a valve amplifier cannot be bettered, interest in building your own tube audio equipment is growing. Includes construction projects for pre-amplifiers, power amplifiers and musical instruments amplifiers. Aimed at the practical audio/hi-fi enthusiast, this book offers much information on the operation on tubes and includes a chapter on the history of the tube.

251 pp, 1.1 lbs 6.5" x 9.5"

While Supplies Last

B-727 \$29.95

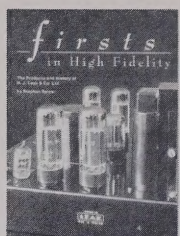


Evolution of the Audio Recorder

By Phil van Praag

Finally, a comprehensive guide to the audio recorder, this book explains the mysteries and tracks the evolution of the audio recorder. Provides repair and restoration guidelines, buying tips, identification criteria and pricing guidelines. Covers over 125 brand names, with over 500 photos and illustrations. The definitive guide to vintage wire and tape recorders. 500 pages, 1.1 lb 5.5" x 8.5"

B-759 \$39.95



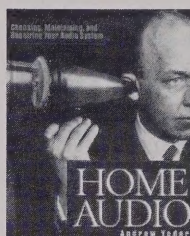
Firsts in High Fidelity

By Stephen Spicer

This book is the unique and comprehensive story about one of the world's best high-fidelity audio companies - H.J. Leak & Co. Ltd. The reader is presented with a stunning collection of delights, through a lucid extensively researched text, accompanied by over 300 photographs many of which have been supplied from personal collections. A must for any audiophile is this compendium of 30 circuit diagrams for the classic designs of the day, including some of the rarest model amplifiers and radio tuners produced by the company. This invaluable resource is presented in conjunction with detailed technical information on previously undocumented design variations. 275 pp 1.8 lbs 7.75" x 10.5"

New!

B-873 \$24.95



Home Audio: Choosing, Maintaining and Repairing your Audio System

By Andrew Yoder

Don't invest in a home entertainment system until you read this book. The author of *Auto Audio* tells exactly how to put together the custom system of your dreams. Chapters cover: choosing a system, amplifiers, tape decks, digital discs, turntables, speakers, speaker enclosures, filters and crossovers, wire, antennas, shortwave, antique audio and repair. 381 pp, 1.8 lbs 7.5" x 9.25"

Blowout Price!
While Supplies Last

B-796 \$16.95

Audio speakers



Introduction to Loudspeaker Design

By John L. Murphy

For all hobbyists, students and engineers that are interested in an overview of the technology of loudspeakers. Topics include tradeoffs, spatial loading, diffraction loss, cavity effect and enclosure construction. There is also a complete chapter about crossover design. 166 pp, 1 lb 5.25" x 8.25"

New Lower Price **B-811 \$22.95**
While Supplies Last



London Power DIY Speaker Cabinets for Musical Instrument Applications

By Kevin O'Connor

Speaker cabinet design is mysterious to most people, but it doesn't have to be - especially when it comes to speakers for musical instruments. Cabinet evolution is described culminating in Kevin's own designs built by London Power, based on 20+ years of experience and input from expert speaker designers. Resonant and non-resonant cabinets are explored, along with the choice of building materials, finishes, woodworking techniques, installing grill cloth, and the use of wheels and handles. Driver selection and mixing is detailed, covering driver impedance, power ratings and wiring. Dare to design bad tone right out of your life! Spiral bound 77 pp, 1 lb 5.5" x 8.5"

New!

B-884 \$15.00



The Loudspeaker Design Cookbook 6th Edition

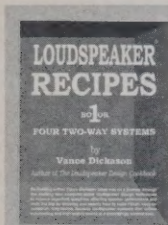
By Vance Dickason

Completely revised and updated book represents the standard in loudspeaker design and construction. Includes a home theater project and a chapter on transmission line speaker design. Detailed explorations of new technologies in loudspeaker design and updates on computers in the design and testing process. 295 pp. 2.5 lbs 5.5" x 8.5"

New!

B-862 \$39.95

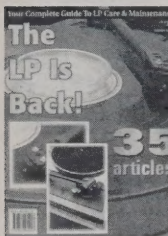
fax: 480.820.4643 OR 800.706.6789 (us & canada only)

**Loudspeaker Recipes, Book 1**

By Vance Dickason

Lays a firm groundwork, both theoretical and practical, for building as many varied and successful two-way loudspeakers as you wish. Helps you look for the right driver characteristics to be paired successfully with the right crossover components and also how to fix any anomalies which may trouble your particular choices.

This book benefits from the latest techniques for computer-aided design, but is also rich in proven construction practices for building practical systems. 112 pp, 1 lb 8.5" x 11"

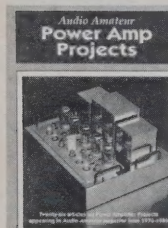
While Supplies Last**B-813****\$14.95****The LP is Back!**

From the pages of *Audio Amateur* magazine and other sources, absolutely everything the serious LP music collector needs to get the most out of both vintage records and the highest quality new pressings. Articles cover: Cleaning discs; how to build a cleaning machine; calibrating and maintaining your tonearm and cartridge; equipment which will improve the quality of long play record listening. Collected from the high point of this old-new again technology, *The LP is Back!* brings a wealth of information to help you keep your equipment in top form and help you understand and appreciate the best in new products available from cartridges to turntables. 1 lb 8" x 10.5"

B-823**\$12.95****Mullard Circuits for Audio Amplifiers**

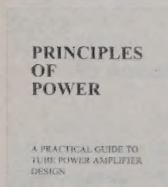
A reprint of a 1959 publication of Mullard Ltd., detailing high-quality circuits for audio amplifiers, pre-amplifiers and other stereophonic reproduction equipment. These designs were originated by Mullard engineers at the Mullard Applications Research Laboratory, and originally appeared in various magazine articles with notes on construction and assembly.

136 pages, 1.0 lb 8" x 10"

B-655**\$16.95****Power Amp Projects: 26 Articles on Power Amplifier Projects Appearing in Audio Amateur Magazine from 1970-1989**

Re-printed articles on amplifiers for the home (both tube and solid state), amplifiers for a car and even an electrostatic speaker system. Original designs as well as upgrades to older equipment. Article authors include Roger Sanders, Nelson Pass, Reg Williams, Erno Borbely and more. Altogether this book offers

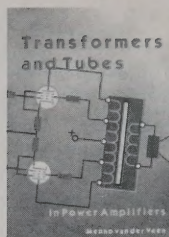
designs from authors from six countries to fit almost any need for the resourceful amateur who prefers the pleasure of building his or her own. 201 pp, 1.1 lbs 8.5" x 11"

B-754**\$19.95****Principles of Power***A Practical Guide to Tube Power Amplifier Design*

By Kevin O'Connor

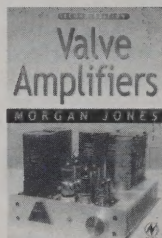
Offers a simplified method for designing tube power amps for audio. Tube operation is explained, as are circuit principles. Class-A or B, cathode, fixed bias, and push-pull and single-ended designs are covered, as are many front-end circuits. Includes designs using off-the-shelf transformers and current production tubes. Power

outputs of 15 to 400W are depicted using pentodes and true triodes. Also, covers power supplies, selected tube data, and information on Hammond and Plitron transformers. 210 schematics. 221 pages, 1.7 lbs 9" x 11"

B-726**\$39.95****Transformers and Tubes in Power Amplifiers**

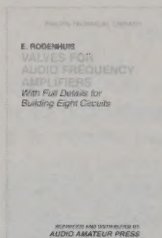
By Menno van der Veen

Covers in detail the use of transformers in tube audio circuits. Starts with the basics and works up to the complex, including mathematics and formulas used for transformer applications. Attention is given to toroidal transformers, but the information can be applied to all tube amplifiers. 60+ pages, 1.1 lbs 9" x 11"

No Longer in Print**B-740****\$29.95****While Supplies Last****Valve Amplifiers, Second Ed.**

By Morgan Jones

Builds on the strength of the first edition; do-it yourself basics, circuit analysis, theory, design principles, construction techniques, etc. This expanded edition has new sections on output transformer problems and heater regulators, and three new projects, including a low-noise singled-ended LP stage. 2 lbs 6.25" x 9.25"

B-838**\$49.95****Valves for Audio Frequency Amplifiers**
With Details for Building Eight Circuits

Reprinted from the Philips Technical Library, by Audio Amateur Press. Philips, one of the world's oldest tube manufacturers, offered this manual for enthusiast in 1954. It's a practical volume for building quality audio amplifiers. Topics include; using the operating data provided, feedback, tone control, the output transformer, amplifier input circuits, microphone, gramophone pickups, & loudspeakers. There are pointers to keep control of

hum, noise, interference and heat to avoid noisy and destructive operation. 144 pages, 0.5 lbs 5.75" x 8"

B-779**\$16.95****Valve & Transistor Audio Amplifiers**

By John Linsley Hood

A look at 50 years of audio amplifier designs with chapters on passive components, negative feedback, power supply, pre-amps etc., in the hope that the information may be of interest to the user or would-be designer. Included is an exploration of some of the residual problems and ways by which they may be lessened. 250 pp. 1.5 lbs 6.25" x 9.25"

New!**B-868****\$42.95****The Williamson Amplifier**

By D.T.N. Williamson

In 1947 Williamson began the high fidelity movement with his power amplifier, using high quality push/pull output tubes, a special output transformer and a highly filtered power supply. In the mid-1950's Wireless World published his articles on amplifier, pre-amp and tuner design. This reprint contains data on winding your own transformers, chassis layout diagrams and practical

advice on building amplifiers. 37 pp, 0.3 lb 7.25" x 10"

B-560**\$5.95**

Warning: Once you read one, you'll want them all!

VACUUM TUBE VALLEY

Edited by Charles Kittleson

Very high quality publication for electronic enthusiasts interested in the colorful past, present and future of vacuum tube electronics. All issues still available, get the whole set. Check with us for the new quarterly issues as they come out during the year. Fantastic reading and pictures. All issues are 8.5" x 11"



Issue 1

16 pages • The early years of Dynaco • Early amplification • Tubes vs. transistors • How to screen tubes • Review of the 12AX7 family of tubes. 0.1 lb.

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Issue 2

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Issue 4

40 pages • 60th anniversary of the 6L6 family • Harmon Kardon Citation series • Why the FM band is 88-108 MHz • Tube manual reviews • AC meters • Guitar amp biasing • Inexpensive vintage bookshelf speakers and more. 0.2 lbs.

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Issue 5

40 pages, includes an interview with Marantz's Sid Smith and Dick Sequerra, Uncle Eric's (Barbour) deluxe SV-811 single ended project, the ultimate FM tuner shoot-out with both vintage and modern gear, a VTV visit to Hong Hong's vintage Hi-Fi scene, 1950's guided missile tubes for Hi-Fi use, book reviews and more. 0.2 lbs.

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40 pages • History of the Fisher 500 family with a tribute to Avery Fisher • Lofton-White amplifier • 6550/KT88 tube family • The little known 5687 tube • Randall Amplifier • Book review and test bench. 0.2 lbs

B-216 \$11.95

Issue 7

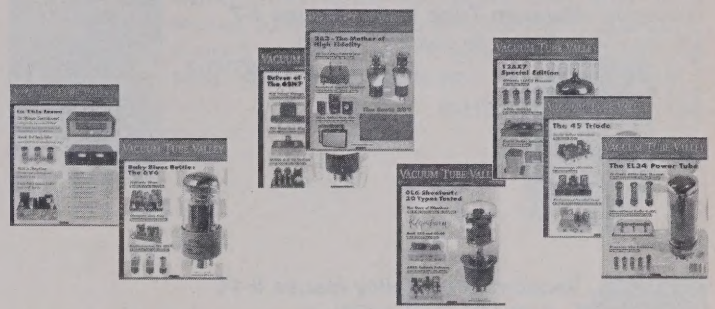
40 pages • 6DJ8 family of tubes and other frame grid tubes • Vacuum tube computers • Big time theatre sound with Altec Lansing • The Peter Jensen Story. 0.2 lbs.

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Issue 8

42 pages • RCA tube manufacturing • Sweep tube OTL amp • Listening evaluation of 300B tubes • Review of the Radiotron Designer's Handbook • Interview with Bruce Moore. 0.3 lbs

B-218 \$11.95



Issue 9

42 pages • Features on the 211 and 845 tubes • Transmitting tube test amp • The Ampeg SVT • 3rd in a series of the first personal computer (yes, they had tubes!) • The Altec 287W • Bargain vintage hi-fi. 0.3 lbs.

B-219 \$11.95

Issue 10

42 pages • 6V6 History and Listening Test • Bruce Moore Interview, Part 2 • Maxi-Matcher Tube Tester Review • 35 Watt Triode Amp Project • Distortion Analyzers • Dumpster Tube 6AV5 and More. 0.3 lb.

Special Low Price! B-220 \$10.95

Issue 11

42 pages • History and testing of 6SN7 • VTV octal line stage project • Kit review of the Asusua A-4 kit • Capacitor listening test and the dumpster tube is the 6688. 0.3 lb.

Special Low Price! B-221 \$10.95

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42 pages • 2A3 History/Listening test • 300B Amp Project • Allen Amplification guitar amp review • Modern bookshelf speakers • Scott 299/299B History and Upgrade • Guitar amp books • Dumpster rectifiers. 0.3 lb.

B-222 \$11.95

Issue 13

42 pages • 6L6 listening test (NOS and Current Production) • 2A3 Amp Project • Klipschorn History, with Paul Klipsch Interview • Scott 222 and LK-48 History and Restoration • 6528 Cathode Follower Amp • Dumpster subminiature tubes and more. 0.3 lb.

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42 pages • 12AX7 Shoot-out (52 different versions) • David Hafler Interview - The Acrosound Years • SV83 amplifier project based on Dynaco ST-35 outputs • Direct Reactance Drive amplifier • Dumpster 7 pin power pentodes • Current production equipment reviews and more. 0.3 lb.

B-224 \$11.95

Issue 15

43 pages • The 45 Triode • Eight 45s Amp Project • Assemblage SET 300B • Tube Dumpster: 9 pin • Tube Testers Book Review • RF Powered Amplifier • David Hafler-Dynaco • Computing with Tubes • 12AX7 Hi Fi Shootout • 0.3 lb.

New! B-225 \$11.95

Issue 16

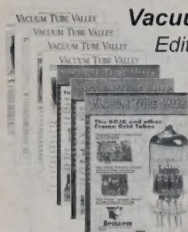
42 pages • Ultrathin, Parallel Feed • Tube Dumpster • Dating Philips Tubes • Life & Times of the EL34 • Interconnects in Review • Hagerman Vacuum Trace • IAG SE Amp Review • Headphone Amp Project • EL34 Shootout for Hi Fi and guitar • 0.3 lb.

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Most back Issues are priced at \$11.95 which reflects the higher cost to reprint.

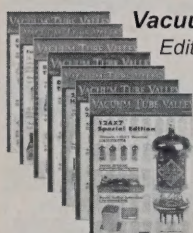
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**Vacuum Tube Valley Issues 1-7**

Edited By Charles Kittleson

B-VTV1-7 \$75.00

**Vacuum Tube Valley Issues 8-14**

Edited By Charles Kittleson

B-VTV8-14 \$73.00

MORE FROM CHARLES KITTLESON**Vintage Hi Fi Price Guide 2000-2001**

By Charles Kittleson

Newly updated, a companion price guide to the Hi Fi Spotter's Guide I & II. Shows approximate collector values for the most popular vintage amps, pre-amps, tuners, and speakers: McIntosh, Marantz, Fisher, Scott, Leak, JBL, Western Electric, Jensen, and many more. 23 pages. 0.5 lbs 8.5" x 11"

New Lower Price!

While Supplies Last

B-841 \$19.95

**Vintage Hi-Fi Spotters Guide**

By Charles Kittleson

A copy of catalog pages and advertisements of 1950-1962 vintage Hi-Fi components, providing a valuable resource for identification and information. Includes Fisher, Eico, Heathkit, McIntosh, Scott, Harman-Kardon, Marantz, Pilot, Dynaco, Radio Craftsmen and others. 87 pages, 0.6 lbs 8.5" x 11"

New Lower Price! B-597 \$19.95**Vintage Hi-Fi Spotters Guide, Vol. 2**

By Charles Kittleson

Supplement to above book covering 1925-1963 vintage Hi-Fi components. Includes amplifiers, pre-amps, speakers, phonographs, receivers and other equipment not covered in volume 1. 88 pages, 0.6 lb 8.5" x 11"

New Lower Price! B-639 \$19.95**Technical****1928 Radio TROUBLE SHOOTING****1928 Radio Troubleshooting: A complete and Practical Wrok on Radio Receiver Troubles and How to Cure Them**

By Enno R. Haan

A re-print of great 1928 nuts and bolts book by then editor of Popular Mechanics. Within each chapter are informative details on tube testing and rejuvenation, filament circuit troubles, how to neutralize a neutrodyne, fixing open circuited loudspeakers, care of headphones and much more. Includes a troubleshooting section and six pages of tube specifications for types such as UX201A, Ceco A,H and K, DeForest DV-5, DL-4, DL-2 and others. Many great line art illustrations. 317 pp, 1.1 lb 5.5" x 8.5"

B-766 \$12.95

**1934 Official Shortwave Radio Manual**

Edited By Hugo Gernsback

A high-quality reprint of Gernsback's 1934 "Complete Experimenter's Set-Building and Servicing Guide," including a "Full Directory of All Short Wave Receivers." Contains schematics of over one hundred different commercial receivers, along with a construction section showing how to build many early short wave receiving and transmitting circuits.

260 pp, 1.7 lbs 8.5" x 11"

B-390 \$15.95

**Atwater Kent Radio Service Manual**

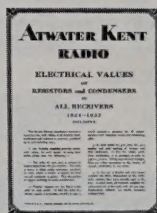
A reprint of the 1928 A.K. factory service manual, covering models 10, 10B, 12, 20, 20C, 30, 32, 33, 35, 36, 37, 38, 40, 42, 44, 48, 49, 50 and 52. Spiral bound. 98 pp, 0.8 lb 9" x 11"

B-356 \$13.95

**Atwater Kent Radio Parts List**

A companion book to the 1928 A.K. Service Manual (B-356), this reprint shows chassis views and parts identification for all the models listed above. Spiral bound. 64 pp, 0.5 lb 9" x 11"

B-357 \$12.95

**Atwater Kent Radio:****Electrical Values of Resistors & Condensers**

Reprint of 1932 Atwater Kent special service manual gives values for resistors and condensers used in every receiver up to 1933. This hard-to-find information is normally not given on Riders or original A.K. schematics. Values may be looked up by A.K. part number or radio model number.

24 pp, 0.1 lb 8.5" x 11"

B-574 \$7.95

Set of All Three Atwater Kent Books (listed above)Save **10%!**

B-AKSET \$31.35

**Instructions for Atwater Kent
Open Mounted Radio Receiving Sets**

High quality reprint of a 1929 Atwater Kent booklet showing photos and battery hook-ups for 14 different breadboard receivers. 12 pp, 0.2 lb 6" x 8.75"

B-600

\$6.95

Antique Radio Restoration Guide 2nd Ed.

Teaches basic technique for troubleshooting and repairing old radios, refinishing cabinets, and following necessary safety precautions. Also contains useful information such as sources for parts, schematics, a glossary of terms and more. 160 pp, well illustrated. 1.0 lb 7" x 10"

B-627

\$17.95

ARRL's Wire Antenna Classics

A Collection of Articles from ARRL Publications
Hung high or low, wires are the best antennas to use to get on the air easily and inexpensively. Hams who have built their own antennas can definitely tell you that wire antennas can give top notch performance. In this book you will find proven antenna designs from QST and other ARRL publications. Has chapters on Dipoles, Loops, Collinear, Wire Beams, and Receiving Antennas. 1 lb 8.25" x 11"

B-820

\$14.00

**Complete Instructions for
Adjusting All Philco Radios**

Reprint of 1934 factory alignment instructions covering all Philco receivers to that time. Shows chassis layouts and adjustment locations for over 50 models. 35 pp, 0.3 lb 6" x 9"

B-554

\$5.95

Elements of Electricity and Radio

Re-print of the original basic electricity and electronics course from the US Navy. Has chapters on mathematical principals (everyone's favorite!), to elementary definitions and ohms law, to applications of vacuum tubes. Also has commonly used charts and tables. If you're interested in electronics, but need to start at the beginning, this book is for you. Great WW II stuff; over 50 years old, but still good info. 205 pages, 0.7 lbs 6" x 9"

B-758

\$9.95

Fixing Up Nice Old Radios!

By Ed Romney

Easy to understand guide to antique radio repair covers everything from crystal sets to the Scott 800B! Uses photos of the insides of popular collectible sets to cover actual repair jobs in detail. Includes AK, Zenith, Bosch, Scott, National, Hallicrafters, Crosley 50, Radiola III, 17, 25, R-28, Philco and others. Explains Wunderlich, AVC, crystal filters, Scott and Zenith push-buttons and band-switches, alignment and more. 170 pp, 1.2 lbs 8 1/2" x 11" spiral bound

B-549

\$34.95

Hammarlund Short Wave Manual

Quality reprint of the Hammarlund 1937 Short Wave Manual, contains instructions for building 12 different, 1, 2 and 3 tube short wave receivers, complete with pictures, schematics and parts lists. 32 pp, 0.3 lb 6" x 9"

B-519

\$4.95

**How to Build the
Twinplex Regenerative Receiver**

By T.J. Lindsay

You can build the 1934 classic Doerle Twinplex, a single tube regenerative receiver powered by batteries! Simple, stable, sensitive and inexpensive. Great project for beginners or those who remember the joy of making your own radio. Includes designs for two other Twinplex receivers, one tube and one solid state. 63 pp, 1.0 lbs 5.5" x 8.5"

B-791

\$7.95

**How to Build Your First
Vacuum Tube Regenerative Receiver**

By T.J. Lindsay

This book will coach you through building your first regenerative receiver. Learn the practical aspects of finding old components and using them toward your goal of building your own little radio. The set described is a real working receiver that was built from salvaged material on hand. 127 pp, 0.5 lbs 5.5" x 8.5"

B-774

\$9.95

How to Build Your Radio Receiver

Classic construction text from 1924. Includes instructions on how to build 7 different receivers ranging from crystal sets to re-generative superhets. Aimed at beginners in 1924, includes section on 44 symbols commonly found in radio circuit diagrams. Antique Electronic Supply cannot supply all the parts needed in all the projects in this book. 100 pp, 0.7 lbs 8.5" x 11"

B-699

\$8.95

How to Make a Neutrodyne Receiver

By F.F. Webb

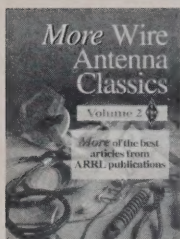
A re-print of 1925 book which shows you how to build a radio like those used before the superheterodyne days. 12 chapters cover topics such as advantages of Neutrodyne, description of a neutrodyne set, vacuum tubes used, how to build the neutroformer, neutralizing condensers, neutralizing the set, antenna for set, operating and troubleshooting. Information can be used to build a set from scratch or to help you restore an original.

59 pp, 0.5 lbs 5" x 7"

B-763

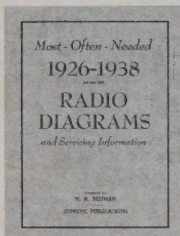
\$6.95

fax: 480.820.4643 OR 800.706.6789 (us & canada only)

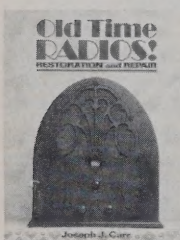
**More Wire Antenna Classics Vol. 2**

Compiled By Chuck Hutchinson, K8CH

Filled with innovative designs from the pages of QST and other ARRL publications. Experience the satisfaction and benefits of building your own wire antennas. More than just creative ideas, these versatile antennas work! If you have the original ARRL's Wire Antenna Classics, you'll want more! 188 pp, 1 lb 8.25" x 11"

New! B-866**\$14.00****Most Often Needed 1926-1938 Diagrams**

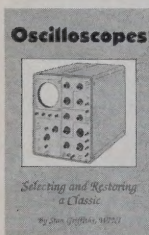
A reprint of Morris Beitman's Supreme Publications book, showing circuit diagrams for 600 of the most commonly found radios of that time. A valuable resource for restorations. 240 pp, 1.4 lbs 8.5" x 11"

New Lower Price!**B-307****\$18.95****While Supplies Last****Old Time Radios! Restoration and Repair**

By Joseph J. Carr

A well-written book on the history, theory and practical operation of old-time radio sets, with detailed instructions on how to repair them. Included is information on how vacuum tubes work, radio troubleshooting, alignment, test equipment, and repairing water damage.

256 pp, 1.0 lb 7.25" x 9"

B-570**\$19.95****Oscilloscopes: Selecting and Restoring a Classic**

By Stan Griffiths

The complete book of Tektronix oscilloscopes from 1950 through the early 1970s. Contains pictures and detailed descriptions of every model in the Tektronix line, along with information and tips on restoring these classics.

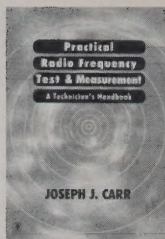
372 pp, 1.0 lb 5.5" x 8.5"

B-631**\$24.95****Philco Condensers and More**

By Ray Bintliff W1RY

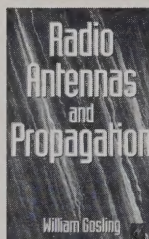
Provides detailed data for Philco Bakelite block condensers, metal-cased condensers and tone controls. Pictorial guides show electrical connections and capacitor values. More than 300 illustrations.

68 pp 8.75" x 11"

B-830**\$15.95****Practical Radio Frequency Test and Measurement, A Technician's Handbook**

By Joseph J. Carr

Teaches readers the basics of performing the tests and measurements used in radio-frequency systems installation, proof of performance, maintenance, and troubleshooting. Anyone interested in gaining more practical proficiency with RF, whether engineer, technician, amateur radio buff, or hobbyist, needs a copy of this book. Joseph Carr, himself an accomplished practitioner in this field, examines the instruments used in various types of measurement before moving on to specific measurement methods. 348 pp, 1 lb 7" x 10"

B-836**\$34.95****Radio Antennas and Propagation**

By William Gosling

This book is a modern, comprehensive, and system oriented text on radio engineering by a pioneer in the field. It covers radio system physics, radio antennas and propagation. This book is a must for those that are serious about radio. 5.5" x 8.5"

While Supplies Last**B-809****\$24.95****Reduced Price! Save \$15.00****Radio-Craft: 50 Years of Radio**

Edited By Hugo Gernsback

A reprint of Gernsback's 1938 special issue of Radio Craft magazine which commemorated the first 50 years of radio. Contains the reminiscences of radio pioneers DeForest, Sarnoff, Conrad, Crosley, McMurdo Silver and others, as well as the famous Gernsback predictions for the next 50 years. Also details the progression of the vacuum tube, mileposts in television and famous early radio circuits.

144 pp, hundreds of photos. 1.2 lbs 8.5" x 11"

B-373**\$15.95****Radio for the Millions**

Prepared By the Editorial Staff of Popular Science Monthly, 1945

From vintage issues of Popular Science Magazine comes this re-print of well-illustrated electronics articles. Topics include phonographs and shortwave radios, cabinet design and radio servicing. Each article has sharp photographs, schematics, and parts lists.

192 pp, 1.0 lb 6" x 9"

B-781**\$11.95****Radio Set Socket Layout Guide 1921 to 1935**

This reprint of a 1935 RCA publication shows tube complement, chassis layout and date of manufacture for thousands of radios produced by over 100 different manufacturers. It also contains a tube data chart and base diagrams for RCA receiving tubes. It is very useful for identifying unknown model numbers or determining which tubes belong in a set. 256 pp, 0.9 lb 5" x 8.25"

B-624**\$9.95**

Radios that Work for Free



Radios That Work for Free

By K.E. Edwards

An experimenters handbook on crystal radios, this book includes instructions and theory for building many different crystal radio circuits. 140 pp, 0.5 lb 5.5" x 8"

B-341

\$12.95

Radio, Wireless Telephone and Wireless Telegraph Equipment

High quality reprint of early (1920's) Montgomery Ward catalog of "wireless" equipment. 32 pages of radios, kits, tubes and books as available 70 years ago. Sorry, you can't order from this catalog! 0.2 lbs 7" x 9.5"

B-697

\$2.95

RCA Radiolas, Radiotrons, and Accessories

A reprint of 1925 RCA promotional literature. 20 pages of pictures and information on models 30, Super VIII, 28, 26, 25, 20, III, and IIIA receivers and loudspeakers #100, 102, 104 and UZ-1325. 20 pp, 0.2 lb 4.75" x 7.5"

B-K15

\$4.95

Radiola Instruction Manuals

Reprints of the RCA instruction manuals, covering installation and operation of the Radiola III series units.

0.2 lb. each 5.5" x 8.5" each

Radiola III B-321

\$4.95

Radiola III-A B-344

\$4.95

Radiola Balanced Amp B-345

\$5.95

Radiotron Designer's Handbook, 4th Ed.

By F. Langford Smith

(reprint) A full reprint from page 1 to 1498 of F. Langford Smith's bible for design of vacuum tube circuits. If you're looking for the original as a collectable, this is not for you, but if you're looking for the data inside, here it is. Hard cover. 1498 pp, 3.5 lbs 6" x 9"

B-795

\$69.95

Ready Set Go!

An Electronics Reference for the Everyman

By Kevin O'Connor

READY SET GO!

AN ELECTRONIC REFERENCE FOR THE EVERYMAN

By Kevin O'Connor

A handy reference for the novice electronic tinkerer and experienced craftsman alike. Informative and easy to read, the book explains: how to read schematic symbols; explains standard notation, S.I. symbols and tolerances; reveals the resistor color code; lists standard resistor values for 1%, 5%, 10% and 20% components; lists standard capacitor values and explains the color coding of vintage caps; explains current, voltage, power, resistance, capacitance and inductance; explains Ohm's Law and how to figure out series/parallel resistance. Transformers and impedance are clearly explained. Examples are worked out throughout the book to illustrate how truly simple basic electronics is! spiral bound. 84 pp, 2 lbs 9" x 11"

B-821

\$20.00

Rider 1947 Master Index to Perpetual Troubleshooter Manuals

Covers volumes I thru XV. High quality photocopy. 205 pp, 1.1 lbs 8.75" x 11"

B-331

\$21.95

Rider Complete Index to Perpetual Trouble Shooter Manuals

Covers volumes XVI through XXII.

48 pp, 0.5 lb 8.5" x 11"

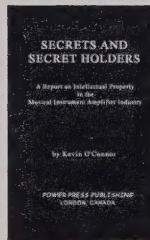
B-347

\$8.95

Secrets and Secret Holders

A Report on Intellectual Property in the Musical Instrument Amplifier Industry

By Kevin O'Connor



This document evolved from a patentability study for the circuit techniques involved in the author's invention trade named Power Scaling. The nuances of electronic art allow designs that are similar to be differentiated for the protection of the individual inventors, and allow each inventor to capitalize on the inventions if they are in different fields. Similar inventions within the same field are problematic, as the grey areas of infringement of design and similarity of application lead to confrontation. Such behavior (as described in this paper) inevitably leads to a negative reputation within the industry that can ultimately hurt the livelihood of the patent holder. 30 pp, 0.1 lbs 5.5" x 8.5"

New!

B-872

\$15.00

Secrets of Homebuilt Regenerative Receivers

By C.F. "Rock" Rockey

Discover the secrets of building regenerative shortwave receivers. These incredibly simple radios will amaze you with their unbelievable ability to pull in signals from every country on earth. All the secrets are here!

127 pp, 0.8 lb 5.5" x 8.5"

B-742

\$9.95

Operators and Organizational Maintenance Manual for TV-7/U, TV-7A/U, TV-7B/U, and TV-7D/U Tube Testers

Reprint includes introduction and general description of tester, operating instructions, maintenance instructions and even instructions for demolition to prevent enemy use! Spiral bound. 44 pp, 0.3 lbs 8.5" x 11"

B-675

\$10.95

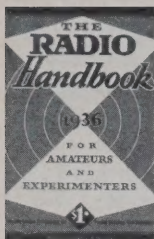
TM 11-6625-274-12

REPRINTED BY THE ARMY TECHNICAL MANUAL

OPERATORS AND ORGANIZATIONAL MAINTENANCE MANUAL
TEST SETS: ELECTRONIC TUBE TESTER
TV-7A, TV-7B AND TV-7D

JUN 1960

fax: 480.820.4643 OR 800.706.6789 (us & canada only)



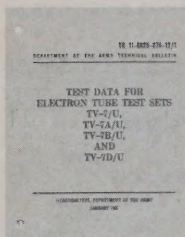
The Radio Handbook 1936

For Amateurs and Experimenters

Another terrific reprint from Lindsay Productions, this is Frank C. Jones' 1936 Radio Handbook with more project information than the 1936 ARRL Handbook. Contains schematics, diagrams, tube data, transmitter construction articles, antennas, power supplies, receiver design, etc. If you're a builder, this is for you! 360 pp, 1.5 lb 6" x 9"

B-843

\$19.95

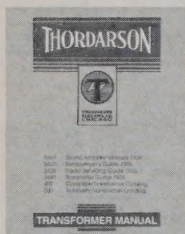


Test Data for TV-7/U Tube Tester

High quality reprint of the test set-up manual for the military TV-7/U, TV-7A/U, TV-7B/U, and TV-7D/U versions of Hickock tube testers, normally supplied in the lid of the tester. Also contains operating instructions, conversion table for Army VT numbers, and data table for CV type tubes. 83 pp, 0.4 lb 6.75" x 5.25"

B-546

\$6.95



Thordarson Transformer Manual

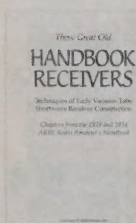
This is a reprint of Thordarson's Sound Amplifier Manual No. 346-A, Serviceman's Guide 342-A, Radio Servicing Guide 342-B, Complete Transformer Guide 400, and TruFidelity Transformer Catalog 500.

144 pp, 1.5 lbs 8.5" x 11"

New!

B-864

\$11.95



Those Great Old Handbook Receivers

Chapters from the 1929 and 1934 ARRL Radio Amateurs Handbook

Chapters deal with detailed receiver theory, construction techniques and power supply secrets from the 1929 and 1934 editions of the ARRL Handbook. If you enjoy electronics, amateur radio, collecting, or just the history of technology, you'll get interesting insight into the beginnings of a technology so common today we almost take it for granted. 158 pp, 0.8 lb 6" x 9"

B-741

\$8.95



Tube Testers and Classic Electronic Gear

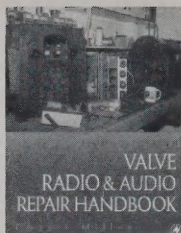
By Alan Douglas

Provides an overview of pre-1970 (the vacuum tube era) radio test equipment. It begins with an extensive discussion of tube testing and use of testers, and progresses into curve tracing. The different types of testers are compared; emission, dynamic and mutual conductance, and testers from 23 different manufacturers are tabulated and pictured. Also covers VOMs, VTVMs, Q Meters, Grid Dip Meters, Capacitance and Inductance Bridges, Signal Generators, Signal Tracers and Oscilloscopes. It includes brief company histories of the manufacturers. Useful for radio collectors, vacuum tube enthusiasts and historians. Over 300 photos and illustrations.

172 pp, 1.3 lbs 8.5" x 11"

B-853

\$25.95



Valve Radio & Audio Repair Handbook 2nd Ed.

By Chas E. Miller

This book is not only an essential read for every professional working with antique radio and gramophone equipment, but also dealers, collectors and enthusiasts the world over. The emphasis is firmly on the practicalities of repairing and restoring, so technical content is kept to a minimum and always explained in a way that can be followed by readers with no background in electronics.

Those who have a good grounding in electronics, but wish to learn more about the practical aspects, will benefit from the emphasis given to hands on repair work, covering mechanical as well as electrical aspects of servicing. Repair techniques are also illustrated throughout. A large reference section provides a range of information culled from many information sources, and also includes specialist dealers for valves, components and complete receivers. 270 pages, 1.4 lbs 7.5" x 9.75"

B-839

\$37.95



The Weekend Refinisher

By Bruce Johnson

Easy-to-follow guide teaches the basics of wood repair and finish restoration. Learn how to repair scratches, veneer chips, fill small holes, raise dents, remove water damage, identify and revive various finishes and more. 295 pp, 1.0 lb 7.25" x 9.25"

B-645

\$14.95



Wireless Communication in the United States

By Thom L. Mayes

The first use of wireless was for marine radio communication. This book is about the inventors, the engineers and the promoters who brought it about. It describes huge spark and arc sending sets that were used on ships and at bleak coast stations. It tells of scientific discovery and patent wars. It was written by T.L. Mayes, an engineer who knew many of the pioneers, and prepared for publication by

Arthur C. Goodnow, a Westinghouse radio engineer and historian.

242 pp, 1.2 lbs 6" x 9"

New!

B-880

\$29.95



Zenith Radio Brochure Book

Compiled By A. Jespersen & M. Emery

A nearly complete compilation of Zenith radio information from 1920 to 1946, photocopied from original sales brochures and other advertising. Includes 40 years of Transoceanic multi-band receivers. Hundreds of radios pictured. Over 50

pages, 11" x 17" spiral bound. 0.8 lb 17.5" x 11"

While Supplies Last

B-610

\$24.95



Zenith Radio Service Manual and Parts List

Re-print of early Zenith service manual. Includes schematics and parts lists for Zenith radios made from 1928 through 1939. Offers help with alignment procedures, antenna alignment, and gives parts lists along with tube layouts on most models.

510 pp, 2.6 lbs 8.5" x 11"

New Lower Price!

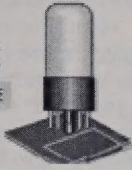
B-755

\$19.95

software
please note:
opened software cannot
be returned. defective
software is returnable for
exchange only.

GLASSWARE

TUBE AUDIO DESIGN SOFTWARE



GlassWare Tube Manual

Leave DOS and the black screen and cryptic keyboard entries behind. A true 32-bit Windows program (95/98/NT), GlassWare Tube Manual is both user friendly and powerful. It's all here: plate curves, mu, rp, Gm, Vh, Ih, base and outline schematics, and essential characteristics. Powerful search and filtering tools give control over this tube manual's large library of tubes. Look up your favorite tubes (6SN7, KT88, 2A3, and 6922) and discover other great tubes you didn't know existed. With the aid of easy-to-use editing tools, tubes can be added or subtracted to the database. Keep track of your own tube collection with GlassWare Tube Manual's personal tube database. Like all GlassWare programs, GlassWare Tube Manual allows you to print the results. Hard copies of all the tubes in this tube manual are a button click away. And tube substitutions are given for over 2000 tube types. CD-ROM.

B-CD055 \$39.95

Tube CAD

The tube voltage amplifier design program for Windows 3.1/95/98/NT. This program covers 13 core tube circuit topologies, each divided into four variations. Thus, Tube CAD covers 52 tube circuits in all. All the popular circuits are here: SRPP, cascode, cathode follower, push-pull, split load phase splitter... Circuit variables (such as tube type, B+ voltage, plate and cathode resistor values) are entered in field boxes and the AC and DC results are then displayed. Tube CAD includes data for 32 triode tube types. Plus define characteristics for any triode not included in the library. Display and print the curves of tube types included with the program. Includes 40+ page user manual. Includes user manual. 3.5" diskette.

B-CD028 \$39.95

SE Amp CAD

SE Amp CAD is a Windows program that helps you design, understand and modify single-ended amplifier output stages—a virtual workbench for single-ended output stage design. True Curves™ is the name of the new mathematical model used in SE Amp CAD. True Curves™ knows how a 300B or an 845 really bends: how the plate current varies with changes in grid to cathode voltage versus changes in plate voltages. With the True Curves™ tube model in SE Amp CAD you can quickly and easily model, evaluate, and understand a tube single-ended output stage. SE Amp CAD holds 30 tube models (triode and triode-connected pentodes) and over 100 output transformer profiles. The output data results, the output circuit schematic, the tube's plate curves (grid voltage, plate voltage, plate current, rp, mu, Gm), the input signal and the resulting output signal—all are displayed interactively by SE Amp CAD. 3.5" diskette.

B-CD031 \$39.95

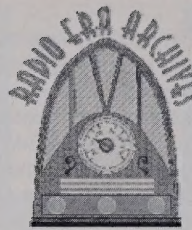
TubeCAD & SE Amp CAD Package

B-CD032 \$75.00

Audio Gadgets

Put away your scientific calculator and text books: Audio Gadgets is a program for Windows 3.1/95/98/NT that helps you design of a step attenuator up to high voltage power supply. Easy to use, yet powerful. Audio Gadgets is really ten programs in one: stepped attenuator design, op-amp circuit design, power supply design, filter design, adj. regulator design, resistor calculator, speaker design, RIAA equalization, tube circuit design and more. Print previews and report printing add to the program's usefulness. Includes 40+ page user manual which is informative just by itself. 3.5" diskette.

B-CD027 \$39.95



Radio Era Archives developed the RadioView digital database software system so that schematics, books, and magazines could be searched for, displayed on the computer screen and printed. We offer three separate series from Radio Era Archives. They run under Windows 3.1 or Windows 95 and have an automatic install program. A PC with VGA monitor or better and 8MB of RAM memory (and CD ROM) is required. These are the only historical and troubleshooting related products on the market with a full database search engine. User can print 1 page, a range of pages or an entire publication. User is restricted by License Agreement and Copyright to use product for personal use only.



Collins Radio Technical CD-ROM Series

4 CD-ROMs containing ALL the COLLINS manuals for amateur communications from 1946 to 1980. Vol.1 contains receivers, Vol.2 contains Transmitters and Amplifiers, Vol.3 contains Transceivers, and Vol.4 contains all accessories, VFO's, Filters, Speakers, etc., etc. For Collins restorers and collectors, these are a MUST! While Supplies Last

Each volume is sold separately.

B-CD051 Volume 1	\$64.95	B-CD053 Volume 3	\$64.95
B-CD052 Volume 2	\$64.95	B-CD054 Volume 4	\$64.95

Military - R-390/R-390A/URR CD-ROM

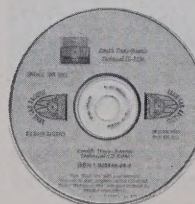
This CD is a unique CD-ROM designed to provide technical and historical information on the R390/R-390A communications receivers. Called the most advanced receiver of all time, the venerable R390 series has seen 3 wars and is still in use in installations throughout the world. This CD-ROM contains both the US Navy and US Army technical manuals. Additionally we have included historical information, resource data, and facts about the R-390A. The famous Fort Devens visual alignment manuals are included. This CD does not use Radio View software but uses your internet browser HTML software for the main program and the technical manuals are all Windows based. Requires Windows 95 or Windows NT running on a personal computer.

B-CD040 \$57.00

RCA HB-3 Tube Handbook

The most complete tube manual ever produced. 10 volumes of every kind of tube imaginable with almost 7,000 pages of detailed information not available elsewhere! Consists of Cathode Ray Tubes, Monoscope Tubes, Thyratons, Ignitrons, Glow-Discharge Tubes, Receiving Tubes-Industrial Types, Receiving Tubes Regular Types, Semiconductor Devices, Miscellaneous Tube Types (ie, Klystron, others), and Transmitting Tubes. All on a single CD-ROM designed to be easy to use. Requires Windows 95 or Windows NT running on a personal computer. If you had this 10 volume manual printed at 5 cents a page, it would cost over \$325 just for copying. This is the reference that you have been waiting for - the most comprehensive, most detailed technical manual ever produced for Tubes - brought to you by Radio Era Archives.

B-CD041 \$80.00



ZENITH TRANS-OCEANIC CD-ROM

This one is for Trans-Oceanic radio lovers. It has EVERY service schematic and alignment information for every Zenith Trans-Oceanic made. It has servicing tips and restoration information as well as a library of pictures of the various Zenith Trans-Oceanic radios. In addition to the Trans-Oceanic schematics, it also has manuals, log sheets, advertising and more.

Requires a PC running Windows 95 or later and an Internet browser such as Microsoft Internet Explorer. This is a great CD-ROM and a real bargain based on limited availability of many of the models service information.

B-CD042 \$89.00

fax: 480.820.4643 OR 800.706.6789 (us & canada only)



Radiophile Volume 1

A unique CD-ROM reference that won't deteriorate with age! 29 Books, 4,200 + pages on a single CD! A collection of difficult, if not impossible to find, old radio books containing radio troubleshooting information, radio reference data and general interest information. This antique radio reference is something that all lovers of old radios should have!

B-CD001

\$85.00

Radio Troubleshooting

- John F. Rider -Radio Troubleshooting by the Resistance method, 932, 209 pages
- John F. Rider - Radio Troubleshooting Guide - Vol. 1, 1954, 156 pages
- John F. Rider -Basic Electronics - Vol. 5, Troubleshooting Radio Receivers, 1955, 111 pages
- Dr. A. Ghirardi's - Most Radio Receiver Problems, 1947, 702 pages
- Philco Service Division - Philco Radio Servicing and Alignment, no date, 35 pages
- Atwater-Kent, Servicing Data, 1928, 98 pages
- Atwater-Kent, Electrical Data, 1932, 24 pages
- Atwater-Kent, Parts Data, 1928, 64 pages
- National Radio Institute - a complete series of "How To" books on theory, troubleshooting and servicing, 1927-1937, 12 books, 375 pages

Reference

- John F. Rider, Perpetual Troubleshooters Manual Index - Vol. 1- 15, 1947, 206 pages
- John F. Rider, Perpetual Troubleshooters Manual Index - Vol. 16- 22, 1951, 47 pages
- John F. Rider, Perpetual Troubleshooters Manual Index - Vol. 23, 1954, 71 pages, includes parts lists and cross-references
- General Electric, Receiving Tube Reference Manual, 1962, 302 pages
- ARRL Handbook, Amateur Radio Handbook, 1955, 764 pages
- RCA - Cunningham "Radiotron Tube Reference Book", 1933, 161 pages

Old Radio Information

- Hugo Gernsback, Radiocraft Magazine -Jubilee Issue, March 1938, 146 pages
- Radio Trade Journal, 1925, 194 pages
- Hugo Gernsback, Quiz Book & Kinks - Shortwave Radio, 1938, 65 pages

Radiophile Volume 2

A terrific radio reference! The fabulous Hugo Gernsback's Official Radio Service Manuals - a wealth of information in 6 rare, hard to find volumes! The complete Zenith Serviceman's schematics with parts listing! Radio data, troubleshooting tips, reference information, old radio schematics in an easy to use electronic reference containing over 5,600 pages on a single CD!

B-CD002

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Radio Troubleshooting:

- Hugo Gernsback - Official Radio Service Manual - 1931, 610 pages
- Hugo Gernsback - Official Radio Service Manual - 1932, 988 pages
- Hugo Gernsback - Official Radio Service Manual - 1933, 703 pages
- Hugo Gernsback - Official Radio Service Manual - 1934, 397 pages
- Hugo Gernsback - Official Radio Service Manual - 1935, 1,009 pages
- Hugo Gernsback - Official Radio Service Manual - 1936, 1,200 pages
- Zenith Radio - Official Serviceman's Guide - Vol. 1, 1,004 pages
- Zenith Radio - Official Serviceman's Guide - Vol. 2, 1,004 pages
- Zenith Radio - Official Serviceman's Guide - Parts Listing, 182 pages

The Zenith Series has every schematic for every radio manufactured from inception of Zenith until 1942. The Gernsback Series contains information not contained elsewhere including a great deal of radio schematics not found in Riders, Bietmans, Supreme or other schematic sources. The Gernsback Series is a rare find as an entire collection that is complete. Don't miss adding this series to your collection!

Radiophile Volume 3

A "Must Buy" for serious collectors or repairmen. This is a rare offering! The newest entry to the Radiophile series. One of the best kept secrets in antique radio; The Yaxley-Mallory Radio Encyclopedia and many other fabulous old radio books that should be a must for any collector's library. Radio history in layman's language, solid technical radio theory, world famous circuit design handbook and much, much more available in this CD-Rom offering. Thousands of pages of hard to find, if not impossible to find radio information in an easy to use database driven CD-Rom publication!

B-CD003

\$85.00

• The Yaxley-Mallory Radio Encyclopedia - This is one of the most hard-to-get, and most obscure books in the radio business. Originally started in 1937 with the first printing, we now bring you the 6th edition, published in 1948 and containing radio listings of radios from the beginning of radio to 1948! If you've never heard of the Yaxley-Mallory Radio Encyclopedia, it does not surprise us as almost no one has heard of this book. BUT THIS BOOK IS PROBABLY ONE OF THE MOST IMPORTANT BOOKS AVAILABLE TO THE RADIO COLLECTOR / REPAIRMAN / RESTORER, as it contains information in a way that is not available in any other form. If you've ever had a radio that has no name, no model number, no chassis number and you've wanted to repair it or identify it, THIS IS THE BOOK FOR YOU!

• Radio for Everybody - by Austin Lescarboua of John Rider and Scientific American fame. 1922 edition of a layman's non-technical book of radio, what it does, how it works, etc. The perfect book for the non-technical radio buff in easy to understand form. Very rare radio book with 334 pages, many illustrated, of historical radio information.

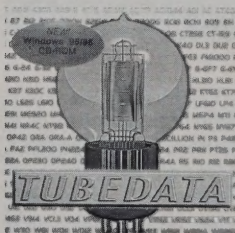
• The Radio Manual - by George Sterling. 1940 technical manuals encompassing 1,120 pages covering all aspects of the radio art and radio theory. A great technical reference manual or for detailed study of specific elements of radio.

• RCA Radiotron Designers Handbook - 3rd Edition - 1945 "Bible" of radio books. This hard to find book is one of the more famous books containing circuit analysis and theory of radio, yet in an easy to understand format. One of the most sought after books with valuable data for radio collectors and persons repairing/restoring old radios. Over 352 pages.

• Tube Substitution Handbook - 111 pages of cross-references of tube substitution information.

• Bernard's English Valve Substitution Manual - 44 pages of English/European tube cross reference data.

• Cunningham 1927 Tube to Radio Cross-Reference - 214 page book containing tube data for older radios. Very useful in classifying the model and make of a radio by tube layout information.



Tube Data

For Windows 95/98

Now available in a Windows CD-ROM version, this is the same information from Tube Data offered in our 2000 catalog (page 69). Tube Data covers over 27,000 tube types from the United States, Canada, Great Britain, Holland, Germany, Russia and other countries. This is an ideal aid for tube collectors, circuit designers, historians and anyone making tube substitutions in vacuum tube equipment. CD-ROM for IBM compatible computers.

B-CD034

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Antique Radio Repair - Vol. 1

A single CD with the most sought after information required for the repair and restoration of antique radios & phonographs! Contains troubleshooting information, radio theory, technical reference and much more. If you are new to antique radio, this should be a MUST purchase to enable you to find your way into this fabulous hobby or avocation!

B-CD010 \$85.00

Theory:

- Radio Theory and Operating by Mary Texanna Loomis - 848 pages - very famous author of radio circuit design.
- Understanding Radio by National Radio Institute - 345 pages in 12 books covering all aspects of radio repair.

Technical Reference:

- GE Receiving Tube Manual - 302 pages of invaluable tube reference data and information.
- Tube Substitution Manual - 111 pages of tube substitution information.
- Bernards Tube Substitution Manual - 44 pages of English/European tube substitution data.
- Cunningham Reference Manual 1927, 214 pages of radio tube/radio cross reference data.
- Reading Radio Diagrams by American Technical Society - 1927 - 114 page book on how to read radio schematics.

Radio Repair:

- Profitable Radio Repairing - Marcus, 1956, 330 page book on how to effectively repair radios in a minimum of time.
- How It Works - Rider, special publication by John F. Rider from the Perpetual Trouble Shooters Manuals, volumes 8-11, 15-17 and the P.A. Manual. 504 pages of highly descriptive information on radio circuits and the analysis thereof.

Antique Radio Repair - Vol. 2

John Rider was one of the most prolific electronic publishers of his time. His world famous Perpetual Troubleshooters Manual ensured that fame. However, Rider published many other "MUST" books. This CD is a compendium of John Rider technical series publications about antique radio, how the circuits work, etc. A must for every library or person wanting to learn better how to repair old radios and the theory behind the repairs. Contains almost 3,000 pages of pertinent technical and helpful information. Runs on a PC running Windows 95 or later and an internet browser program such as Internet Explorer or Netscape.

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The World Famous Perpetual Troubleshooters Manual by John F. Rider was published in 23 Volumes containing over 35,000 schematics. They have been recreated on 6 separate CD volumes (each stand alone). This is the worlds greatest resource for old radio schematics! Over 35,000 schematics covering over 100,000 radio models.

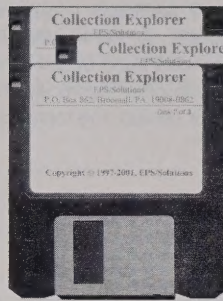
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Vol. 9-12 (1937-41)	B-CD022	Vol. 21-23 (1950-53)	B-CD025

Complete Rider's Index

Due to constant requests, Radio Era Archives has taken all the indexing from their Rider's 6-CD series and have made it available on CD-Rom. This CD requires HTML browser software and either the ability to read PC text or PC Excel spreadsheet file. Every radio in this series is alphanumerically listed with the starting and ending ".tif" graphics numbers indication starting page and ending page number for specific schematics. The Excel file is preferable due to multiple column spacing and lining up the columns for easy reading.

B-CD019 \$34.00



Collection Explorer

Now you can know exactly what's in your basement! Designed for Windows 95/98/NT, **Collection Explorer** helps organize and track your radio collection. You can group your collection into categories, and customize the way item information is stored and viewed.

Collection Explorer is designed to look and operate like Microsoft's Windows Explorer.

This makes it extremely easy to use. The program comes pre-loaded with many categories for radios, parts, tubes, etc, and you can add your own. Items can be imported from other programs, and a variety of reports can be printed.

Collection Explorer lists your categories in a "tree." Categories can contain subcategories, and so on. You can drag-and-drop items and categories to arrange your collection as you see fit.

You can also create custom columns to hold information about the items in your collection, such as each item's name, the quantity in your collection, its value, etc. You specify the name of the column, the type of data it will hold (such as "Date" or "Currency") and the maximum number of characters the column will hold. Each item can also have an attached photo and memo.

Collection Explorer's default categories are geared toward radio collecting, but it can be used to track any type of collection you may have. Comes on 3 1/2" floppy disks.

While Supplies Last

B-CD033

\$39.00



The Old Timer's Bulletin

Back Issue Library: Issues I & II

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These CDs contain back issues of the Antique Wireless Association's *Old Timers Bulletin* that are not available from any other source. The included searchable index makes a wonderful research tool for historians and collectors.

CD 1: Contains all issues from 1-1 (January 1960) through 25-4 (March 1985)

CD 2: Contains all issues from 26-1 (June 1985) through 37-4 (November 1996)

System Requirements

- PC or Macintosh
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- 486 or Pentium processor-based PC
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- 8Mb RAM on Windows 95 or 98 (16Mb recommended)
- 10Mb of available hard disk space

0.4 lbs

New! **B-CD057**

\$89.95



For IBM PC and compatibles, this package is a Tube Manual on your computer. It has the information expected in a tube manual, plus several new, powerful features. You can look up specs and pin outs, search for tubes that meet your specs, and find substitutes. VTDATA also provides features for maintaining your personal tube inventory.

Intended for designers, repairmen, and collectors, VTDATA's database contains electrical specs for over 1200 of the most commonly found tubes, including tubes of historical interest, such as the early "two digit" types and hi-fi audio types. DOS 4.01 or higher, or Windows required. 3.5" disk.

B-CD029 \$29.00

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Interested in repair, service or in parts we don't carry? Listed below are some of the folks we call when we need help. These are good people, (or we wouldn't list them!). However, please use this list as a reference, not as an endorsement or recommendation. Use good business sense with dealing with anyone, (yes that includes us!).

Much as we'd like to offer technical advice and service, we just don't have the time or resources. Please utilize these or other folks for your design and technical needs. You can also check our website at www.tubesandmore.com for links and technical notes.

Repairs and Services

Antique Radio

Charles Defir (AZ)
480.610.8495
charliedefir@att.net
Antique Radio
Restoration & Repair (CT)
Bob Esslinger
860.928.2628
Antique Radio and TV (CT)
860.442.0233

Cabinet Refinishing

Toppo Restorations (AZ)
602.993.5361
lynntoppo@earthlink.net

Cabinet Restoration, Radio Repair

Ken Krol (AZ)
602.604.8853
djkrol@earthlink.net

Car Radio

Ray's Auto Stereo (CA)
916.447.9753
rgarcia132@aol.com

European Radios

Bavarian Radio Works
781.447.4299
www.bavarianradioworks.com
Audio Imports LTD (CA)
626.447.3117
audioimportsltd@aol.com

Fisher Restoration; All Tube Equipment

Fisher Radio Corp (NY)
Al Pugliese
718.948.7489
fisherDoc@aol.com
North County Service Center(CA)
pbuscema@earthlink.net

Guitar Amp Repair

Allen Amplification (KY)
Fender 50's - 70's Amps only
859.485.6423
Clark Amplification (SC)
803.791.8195

Guitar Amp, Hi-Fi

Evan Aurand (CA)
evan@classamp.com
Jim Munzer (AZ)
480.491.5975
terraomm@worldnet.att.net

Hi-Fi, Antique Radio, Jukeboxes

Mike Zuccaro (CA)
858.271.8294
mjzuccaro@aol.com

Tube Audio Repair and Sales

DeWick Repairs (TN)
www.esper.com/macaudio

Older Television and Radio Repair

Radebaugh Radio & TV (AZ)
480.963.5222

Old Telephone Parts and Repairs

Phoneco (WI)
608.582.4124

Philco Predicta

David Weddington (TN)
615.890.7498
predicta@usit.net

Speaker Reconing, Field Coil Rewinding

Hank Brazeal (AL)
205.823.9257
hankspkr@home.com

Transistor Radio Cosmetic Restoration

Eric Wrobbe (CA)
818.884.2282
ewrobbe@aol.com

Tube Hi-Fi Repair, Design, Construction

Don Allen (AZ)
602.244.1448
doninphx@aol.com

Parts & Supplies

(that we don't have of course!)

Dial Covers

Doyle Roberts (AR)
501.745.6690
drob@hypertech.net

Dial Scales - For Antique Radios, HAM, Auto and OEM

Rock-Sea Enterprises (CA)
Mike Tobin
805.646.7362
dials@juno.com

Manuals

Pete Markavage (NJ)
732.238.8964
www.manualman.com

Needles and Cartridges

West-Tech Services (TN)
Charles Carey
888.828.8455
931.424.1212
Vintage Electronics
Ed Crockett
601.264.4755
phonoed@aol.com

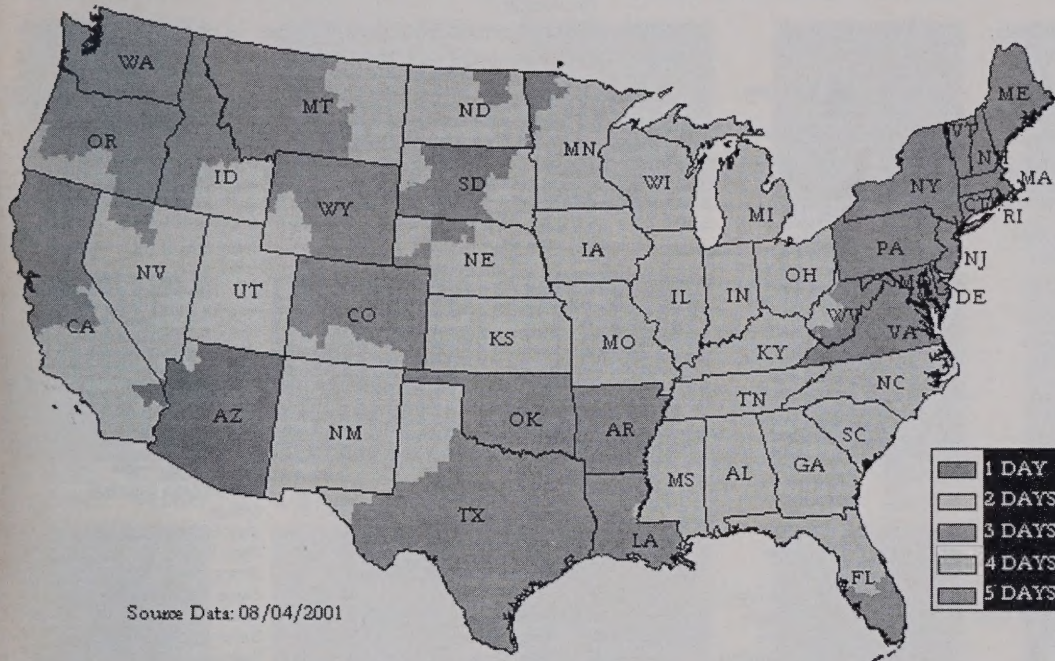
Reproduction Knobs; Philco Escutcheons

Larry Bordonaro (CA)
818.786.2500
oldtimerep@aol.com

Voice of Music

Voice of Music (MI)
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www.thevoiceofmusic.com

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The UPS rates shown in the following chart are effective through February 2002, at which time UPS will issue new rates. The rate increase in 2001 was approximately 4% and will probably be about the same in 2002. **Please note that these are estimated shipping charges and that we cannot quote exact shipping charges over the phone for any service.**

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2-3	4.59	4.98	5.14	5.44	5.59	6.01	5.20
4-6	5.01	5.53	5.83	6.13	6.39	6.92	10.40
7-9	5.39	5.85	6.21	6.66	7.18	8.03	14.75
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15-20	7.15	7.42	8.49	10.42	12.34	14.31	30.70
21-26	8.24	8.75	10.19	12.78	15.05	17.76	39.40
27-32	9.27	10.15	11.91	15.14	17.81	21.22	48.10
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S-G426 - Same pattern as the S-G432, but in silver. Made for Emerson and Deco Models.

S-G429 - Philco Model 60 for years 1934, 1935, and early 1936 (See S-G440 for late 1936 and beyond)

S-G431 - Philco Models 70, 90, 89, 19; Zenith Models 8-S-463, 9-S-367; Grunow, Crosley and other Models from the late 1930's

S-G432 - For Emerson Models

S-G434 - RCA 100A Speaker

S-G435 - RCA, GE, and Westinghouse Models

S-G440 - Philco Model 60 late 1936 and up.

S-G441 - Philco 84

S-G959 - Zenith Consoles from the late 1930's

S-G961 - Smaller Zenith Consoles from the late 1930's

S-G963 - Zenith, Fada, Silvertone from the 1930's

S-G964 - Deco looking consoles from 1937. Zenith leaf design

S-G965 - Zenith swirl, Shutterdale and Walton, Tombstone Sets. Reversible

S-G966 - Philco Diamond for models from late 1939 and 1940

S-G967 - Zenith consoles from the 1940's

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Acoustone Grill Cloth

12" x 18" of modern grill cloth by Acoustone. Eight assorted patterns, our choice. **While Supplies Last.**

S-G114

\$12.00

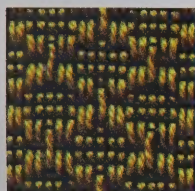


S-G430 \$22.95/ft

31" appx. width *see note on page 96*

Speaker Cloth

Custom made to duplicate early radio speaker cloth. Colors may vary somewhat due to different lots and fabrics used. Sold in 10" x 12" pieces or by the foot (see bottom for widths) in increments of 6" after the first 12". If you would like a small sample to evaluate before making your purchase, they are available: first two are free, \$0.75 each after that. A package of one sample of each cloth may be ordered. Part # S-GSRI, \$10.00. (saves \$5.00)



S-G115 \$12.00ea
S-G115F² 20.95/ft



S-G129 \$12.50ea
S-G129F² 21.95/ft



S-G426 \$7.50ea
S-G426¹ 14.00/ft



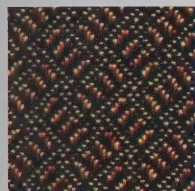
S-G427 \$12.50ea
S-G427² 21.95/ft



S-G429 \$7.50ea
S-G429¹ 14.00/ft



S-G431 \$8.00ea
S-G431F¹ 15.00/ft



S-G432 \$7.50ea
S-G432F¹ 14.00/ft



S-G434 \$8.00ea
S-G434F¹ 15.00/ft



S-G435 \$7.50ea
S-G435F¹ 14.00/ft



S-G436 \$8.00ea
S-G436F¹ 15.00/ft



S-G440 \$8.00ea
S-G440F¹ 15.50/ft



S-G441 \$7.50ea
S-G441F¹ 14.00/ft



S-G959 \$7.50ea
S-G959F¹ 14.00/ft



S-G960 \$8.00ea
S-G960F¹ 15.00/ft



S-G961 \$8.00ea
S-G961F¹ 15.00/ft



S-G963 \$8.00ea
S-G963F¹ 15.00/ft



S-G964 \$8.00ea
S-G964F¹ 15.00/ft



S-G965 \$9.00ea
S-G965F¹ 16.00/ft



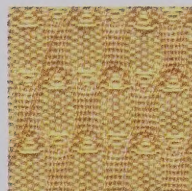
S-G966 \$8.50ea
S-G966F¹ 15.50/ft



S-G967 \$7.50ea
S-G967F³ 14.00/ft



S-G969 \$7.50ea
S-G969F¹ 14.00/ft



S-G970 \$8.00ea
S-G970F¹ 15.00/ft



S-G971 \$12.50ea
S-G971F² 22.95/ft

Cloth Widths

All grill cloth is sold in 10" x 12" pieces. This is the first part # and price. The second part # and price is by the foot.

1 - 24" width

2 - 30" width

3 - 23" width

Grill Cloth

Replacement grill cloth as found on Fender and other vintage guitar amps. Cloth is 34" high. Order enough to cover the width of your cabinet, plus a bit for frayed edges. Sold per linear foot. Note: The exact coloring and patterns of the grill cloth are very hard to reproduce. If you would like a small sample to evaluate before making your purchase, they are available: first two are free, \$0.75 each after that. You may order a packet of grill cloth samples for \$5.00 (this saves \$2.50). The part number is S-GSG-1.



Black/Tan Weave
S-G295 \$8.00/ft



Black Basket
S-G296 \$9.00/ft



Brown Basket
S-G297 \$9.00/ft



Black Waffle
S-G299 \$8.00/ft



Tweed
S-G305 \$11.00/ft



Black Tolex
S-G306 \$11.00/ft



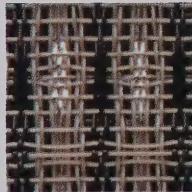
Black/Gold
S-G300 \$9.00/ft



Oxblood/Yellow
S-G301 \$8.00/ft



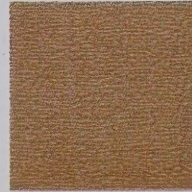
Oxblood
S-G302 \$8.00/ft



Black/Silver/Gray
S-G303 \$9.25/ft



Cream Tolex
S-G307 \$12.95/ft



Brown Tolex
S-G308 \$12.95/ft

Cabinet Covering

Replacement cabinet covering for Fender and other popular guitar amps. Tolex is 54" wide, Tweed is 64" wide. Sold per linear foot.



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